

shift to geographic area licensing for BRS and EBS services is in part based on the need to provide flexibility to licensees so as to encourage efficient use of the fullest capacity of allotted spectrum.<sup>648</sup> We believe that implementing substantial service performance requirements will also promote flexibility and thus allow licensees to provide quality, widespread services to the public.

323. We believe that construction benchmarks focusing solely on population served or geography covered do not necessarily reflect the most important underlying goal of ensuring public access to quality, widespread service.<sup>649</sup> For example, such requirements alone do not take into account qualitative factors important to end-users and the market such as reliability of service, and the availability of technologically sophisticated premium services.<sup>650</sup> While it may be argued that market forces ensure a requisite level of quality in the services reaching consumers, this is not always the case. We seek input on factors that can be used as indicia to satisfy safe harbors under substantial service.

324. We further believe that fixed, inflexible construction requirements hinder widespread deployment of wireless services and do not always reflect elements of service such as cost or, more importantly, populations served. At the least, in some instances, fixed construction requirements do not easily permit the Commission to measure the deployment of service by a licensee.<sup>651</sup> As we have noted, merely satisfying such benchmarks does not necessarily demonstrate adequate deployment in rural areas, to niche markets, or to discrete populations or regions with special needs.<sup>652</sup> We believe that a standard based on substantial service is better able to respond to these various concerns. We agree with commenters and believe that a shift towards a substantial service standard will help encourage licensees to provide the best possible service and avoid "construction...solely to meet regulatory requirements rather

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<sup>648</sup> See Section IV.A.4 *supra*.

<sup>649</sup> See *NPRM*, 18 FCC Rcd at 6803 ¶ 195 ("[F]ocusing solely on the population served via stations authorized pursuant to a particular license hardly tells the story as to whether the licensee is providing adequate service to the public."). See also *Rural NPRM*, 18 FCC Rcd at 20820 ¶ 35 ("[G]iven the unique characteristics and considerations inherent in constructing within rural areas, we believe that applying an inflexible construction standard that is based upon coverage of a requisite percentage of an area's population may be an inappropriate measure of levels of rural construction.").

<sup>650</sup> See, e.g., Nextel Reply Comments at 15-16 ("[A] substantial service standard will provide licensees greater flexibility to determine how best to implement their business plans based on criteria demonstrating actual service to end users, rather than on a showing of whether a licensee passes a certain portion of the relevant population."). See also, Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, *Second Report and Order*, 10 FCC Rcd 6884 ¶ 41 (1995) (900 MHz *Second Report and Order*) ("We also conclude that a showing of "substantial service" is appropriate for 900 MHz because several current offerings in this band are cutting-edge niche services.").

<sup>651</sup> The Commission has recognized that because certain types of services and technologies do not lend themselves to compliance with strict construction requirements, they are better gauged based upon a substantial service requirement. For example, fixed, point-to-point operations provide service in a linear manner, making a coverage area calculation inapplicable. See, e.g., Amendment of Part 90 of the Commission's Rules To Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943 ¶ 156 (1997).

<sup>652</sup> See *Rural NPRM*, 18 FCC Rcd at 20820 ¶ 35; see also Coalition Proposal at 45.

than market conditions.”<sup>653</sup>

325. The Coalition argues that substantial service standards would allow the Commission to evaluate a licensee’s entire system of stations, rather than each station’s service standing alone.<sup>654</sup> This is important and relatively unique in the context of MDS and ITFS service, according to the Coalition, because MDS and ITFS providers, unlike those providing most other services, will use channels combined from a variety of sources.<sup>655</sup> Thus, the Coalition asks us to “recognize that in some cases a licensee may not use particular spectrum covered by one license, or certain channels authorized by a license, that is part of a larger operating system” because the licensee is using the spectrum in some other way still critical to the system’s overall design.<sup>656</sup> In other words, a system otherwise providing substantial service may yet necessitate limited cases of what appears to be warehousing.<sup>657</sup> The Coalition also argues that system operators may not build out some spectrum so that it can be held for future uses demanded by the market.<sup>658</sup> Finally, the Coalition and other commenters argue that licensees may focus portions of their service to particular constituents rather than the general population of the GSA.<sup>659</sup> For these many reasons, the Coalition not only supports substantial service requirements over fixed benchmarks, but recommends that Commission evaluations under this standard proceed case-by-case, looking at the overall service of one parent provider/licensee as opposed to the adequacy of service within a single service area.<sup>660</sup> We see merit in at least some of these arguments; however, we do not plan to proceed on a case-by-case basis in determining whether substantial service has been met. Rather, as discussed below, we instead seek comment on specific safe harbors that will meet the proposed substantial service standard for BRS and EBS services.

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<sup>653</sup> SBC asserts that construction requirements “likely would result in the construction of facilities solely to meet regulatory requirements rather than market conditions,” possibly causing facilities to be “constructed inefficiently, and guided more by regulatory necessity than the need to provide least-cost service to consumers.” See SBC Reply Comments at 11. SBC says the consequence would be unnecessarily high rates. See SBC Reply Comments at 11. Finally, SBC argues that fixed construction benchmarks would be inconsistent with the pro-competitive policies of the Act, handicapping new entrants into the broadband services market. See SBC Reply Comments at 11. We acknowledge that one of our goals is to encourage competition in wireless broadband by creating new opportunities for new entrants. Thus, SBC supports a substantial service standard for these primary reasons. See SBC Reply Comments at 12.

<sup>654</sup> *NPRM*, 18 FCC Rcd at 6803 ¶ 195; see also Coalition Proposal at 45.

<sup>655</sup> See *NPRM*, 18 FCC Rcd at 6803 ¶ 195 (citing Coalition Proposal at 35, “MDS/ITFS may pull spectrum from “their own BTA authorized stations, incumbent MDS stations they own, and leased capacity of MDS and ITFS stations licensed to others.”)

<sup>656</sup> *NPRM*, 18 FCC Rcd at 6803 ¶ 195; see Coalition Proposal at 45.

<sup>657</sup> IPWireless is in apparent agreement with the Coalition that some spectrum could permissibly be used as guard band and still be considered a valid part of a licensee’s commercial service. See IPWireless Reply Comments at 7; see also Sprint Comments at 17. However, the IPWireless response cautions some qualification: “Spectrum used to provide any guard bands necessary to conform to the rules, consistent with sound engineering practices, should be counted as having been placed in commercial service. [However, t]he term ‘commercial service’ should be limited to direct links between a carrier’s network and one or more end users/subscribers.” IPWireless Reply Comments at 7.

<sup>658</sup> *NPRM*, 18 FCC Rcd at 6803 ¶ 196; see Coalition Proposal at 46.

<sup>659</sup> *Id.*

<sup>660</sup> *Id.* at 6803 ¶ 197; see Coalition Proposal at 46.

326. Many commenters favor a substantial service standard for geographically-licensed MDS and ITFS operators. Sprint agrees with the Coalition that a substantial service performance standard will best suit the MDS/ITFS regulatory scheme, “particularly as the centerpiece to this model is likely to be flexible use within a geographic area.”<sup>661</sup> Likewise, BellSouth “wholeheartedly” supports this standard and takes the position that alternative standards proposed by a few commenters “would not solve the problems associated with the existing patchwork of rules.”<sup>662</sup> EarthLink, Rural Commenters, AHMLC, and HITN, among other commenters, also support a substantial service standard.<sup>663</sup>

327. Not all commenters, however, appear to support a substantial service performance requirement. We note that NTCA supports construction benchmarks, particularly for those larger carriers obtaining licenses for large geographic areas.<sup>664</sup> IPWireless agrees and recommends “stringent construction and operation requirements” to prevent warehousing of spectrum by MMDS and ITFS licensees.<sup>665</sup> To that effect, IPWireless suggests the following fixed benchmarks: MMDS licensees and other operators leasing MMDS spectrum should be required to provide commercial service to at least one community within 36 months, and should build and operate a system capable of serving 1/3 of the GSA population within 48 months and 2/3 of the population within 60 months.<sup>666</sup>

328. We recognize the importance of fixed benchmarks and timetables as incentives to quickly deploy service and avoid spectrum warehousing. We suggest, however, that benchmarks may yet be assimilated into the substantial service framework as safe harbors, rather than as goals unto themselves. We invited comment in the *NPRM* regarding whether we should adopt ‘safe harbors’ to complement the proposed substantial service approach.<sup>667</sup> Most commenters responded positively regarding the substantial service approach proposed in the *NPRM*. Responses regarding safe harbors were similarly favorable, but were vague. We now seek comment on specific safe harbors that will meet the substantial service standard we have tentatively adopted for BRS and EBS services. For example, we seek comment on whether construction requirements such as those proposed by IPWireless above would be suitable as a safe harbor to meet the substantial service standard. We seek comment on what other specific safe harbors – in addition to or apart from these – may be appropriate. Finally, we seek comment on whether licensees’ existing benchmarks, if met, should be available methods of demonstrating substantial

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<sup>661</sup> See Sprint Comments at 16.

<sup>662</sup> See BellSouth Reply Comments at 22.

<sup>663</sup> See EarthLink Comments at 8-9; see Rural Commenters Reply Comments at 3; see AHMLC Comments at 24; see HITN Comments at 8 n.8.

<sup>664</sup> See NTCA Comments at 7. Many commenters are concerned that stringent construction requirements put small carriers at greater disadvantage, especially as such benchmarks regard rural service. See, e.g., NTCA Comments at 7.

<sup>665</sup> See IPWireless Reply Comments at 6.

<sup>666</sup> IPWireless Reply Comments at 6. IPWireless notes that “[t]he proposed requirements are generally based upon those already existing in other services, including broadband Personal Communications Service (47 CFR §24.203 “Construction requirements”) and the Cellular Radiotelephone Service (47 CFR §22.947 “Five year build-out period”).” IPWireless Reply Comments at n.9.

<sup>667</sup> *NPRM*, 18 FCC Rcd at 6801 ¶ 191. We also sought comment on safe harbors in the *Rural NPRM*, another proceeding that affects MDS and ITFS licensees as well as other service-specific licensees. See *Rural NPRM*, 18 FCC Rcd at 20824 ¶ 41.

service.<sup>668</sup>

329. Finally, rural build out remains an important concern to us. We recognize that, “as a result of varying technical and demographics, the economics of providing service can be significantly different in rural areas as compared to urban areas.”<sup>669</sup> With respect to rural areas, we recognize that “market characteristics, especially demographics, will affect the optimal market structure.”<sup>670</sup> Various commenters echo these concerns.<sup>671</sup> In the *NPRM* we sought comment on ways in which our construction benchmarks could be modified to better promote service to rural areas.<sup>672</sup>

330. We seek comment on whether there should be rural-specific safe harbors within the substantial service framework to encourage rural build out. For example, in the Rural *NPRM*, we suggested two safe harbors for rural service.<sup>673</sup> The first, available to licensees providing mobile wireless services, proposed that licensees “will be deemed to have met the substantial service requirement if it provides coverage, through construction or lease, to at least 75 percent of the geographic area of at least 20 percent of the ‘rural’ counties within its licensed area.”<sup>674</sup> For fixed services, we proposed a safe harbor that would consider a licensee to have met the substantial service requirement if the licensee, “through construction or lease, constructs at least one end of a permanent link in at least 20 percent of the ‘rural’ counties within its licensed area.”<sup>675</sup> We seek comment on whether meeting these requirements would be appropriate methods for rural carriers to satisfy safe harbors and satisfy the substantial service standard.

331. Grand Wireless proposes the following fixed construction benchmarks: licensees should be required to cover 30 percent of their rural area population within two years, 50 percent within four years, 70 percent within six years, and 80 percent within eight years.<sup>676</sup> We seek comment, however, on the fitness of these requirements as one way to satisfy a safe harbor, as opposed to using these percentages as fixed construction benchmarks. We seek comment on rural-specific safe harbors.

332. In the *NPRM*, we sought comment on how to define a rural service area.<sup>677</sup> We now note

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<sup>668</sup> See n.638, *supra*. See also 47 C.F.R. § 27.930 (MDS BTA authorization holders), 47 C.F.R. § 21.43 (site-based MDS licensees), 47 C.F.R. § 73.3534 (site-based ITFS licensees). See also Rural *NPRM*, 18 FCC Rcd at 20824 ¶ 41 (“We note that these proposed ‘safe harbors’ are intended to provide licensees with a measure of certainty in determining whether they are providing substantial service, but are not intended to be the only means of demonstrating substantial service. Accordingly, a licensee may still satisfy a ‘substantial service’ standard without complying with one of the safe harbors.”).

<sup>669</sup> Rural *NPRM*, 18 FCC Rcd at 20807 ¶ 7.

<sup>670</sup> *Id.*

<sup>671</sup> See NTCA Comments at 7, Grand Wireless Comments at 13- 14, IP Wireless Comments at 23, Pace Comments at 1, 9.

<sup>672</sup> See *NPRM*, 18 FCC Rcd at 6803-04 ¶ 198.

<sup>673</sup> See Rural *NPRM*, 18 FCC Rcd at 20824 ¶ 41; see also n. 667 *supra*.

<sup>674</sup> Rural *NPRM*, 18 FCC Rcd at 20824 ¶ 41.

<sup>675</sup> *Id.*

<sup>676</sup> See Grand Wireless Comments at 14.

<sup>677</sup> See *NPRM*, 18 FCC Rcd at 6804 ¶ 198.

that this issue is taken up in the *Rural NPRM*, where it was noted that various definitions of "rural" have been utilized by federal agencies generally and the Commission specifically.<sup>678</sup> While the Communications Act directs the Commission to promote the development and deployment of services to rural areas, the Act did not provide a specific definition of rural areas.<sup>679</sup> We have not previously clarified and adopted a definition for rural area, but have rather allowed the term to vary "depending on the particular regulatory initiative at issue."<sup>680</sup> We seek additional comment on the following definitions of rural area proposed in the *Rural NPRM*: (1) counties with a population density of 100 persons or fewer per square mile; (2) RSAs; (3) non-nodal counties within an EA; (4) the definition for "rural" used by the RUS for its broadband program; (5) the definition for "rural area" used by the Commission in connection with universal service support for schools, libraries, and rural health care providers; (6) the definition of "rural" based on census tracts as outlined by the Economics Research Service of the USDA; (7) the Census Bureau definition of "rural" counties; and (8) any census tract that is not within ten miles of any incorporated or census-designated place containing more than 2,500 people, and its not within a county or county equivalent which has an overall population density of more than 500 persons per square mile of land.<sup>681</sup>

### C. Grandfathered E and F Channel ITFS Stations

333. In 1983, the Commission redesignated the E and F Group ITFS channels from the ITFS service to MDS usage.<sup>682</sup> The Commission took this action in an effort to spur the development of MDS to promote effective and intense utilization of the spectrum leading to its highest valued use.<sup>683</sup> As part of its decision, the Commission grandfathered ITFS licensees operating on the E Group and F Group channels subject to the following limitations:

Grandfathered ITFS stations operating on the E and F channels will only be protected to the extent of their service that is either in the operation or the application stage as of May 26, 1983. These licensees or applicants will not generally be permitted to change transmitter location or antenna height, or to change transmission power. In addition, any new receive stations added after May 26, 1983 will not be protected against interference from MDS transmissions. In this fashion, all facets of grandfathered ITFS operations were frozen as of May 26, 1983.<sup>684</sup>

<sup>678</sup> See *Rural NPRM*, 18 FCC Rcd at 20808 ¶ 10.

<sup>679</sup> See generally, 47 U.S.C. §§ 151, 309(j)(3)-(4).

<sup>680</sup> *Rural NPRM*, 18 FCC Rcd at 20808 ¶ 10.

<sup>681</sup> See *Rural NPRM*, 18 FCC Rcd at 20808 ¶ 10. Note that for this proceeding, we take the same position held in the *Rural NPRM* that any definition of "rural area" that is adopted for the purposes of the current proceeding will not affect the definition of rural in other contexts. See *id.* at 20808 nn.24, 41.

<sup>682</sup> See In the Matter of Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in regard to frequency allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service, GN Docket No. 80-112, CC Docket No. 80-116, *Report and Order*, 94 FCC 2d 1203 (1983) (*E and F Group Reallocation Order*).

<sup>683</sup> *Id.* at 1228-29 ¶¶ 61-63.

<sup>684</sup> See In the Matter of Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in regard to frequency allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service, GN Docket No. 80-112, CC Docket No. 80-116, *Memorandum* (continued....)

The Commission stated that “there may be instances where the natural evolution of an ITFS station may reasonably require the addition of receive stations without changing the nature or the scope of the ITFS operation” that would justify the addition of additional receive sites.<sup>685</sup> In those instances, the Commission stated that the grandfathered ITFS licensee could request a waiver of Section 74.902(c).<sup>686</sup> Our rules provide that “in those areas where Multipoint Distribution Service use of these channels is allowed, Instructional Television Fixed Service users of these channels will continue to be afforded protection from harmful co-channel and adjacent channel interference from Multipoint Distribution Service stations.”<sup>687</sup>

334. Commenters in the present proceeding raised the issue of the proper future treatment of grandfathered E and F group ITFS licensees.<sup>688</sup> Grand Alliance argues that the Commission must be fair in establishing the rights of grandfathered MDS licensees on the E and F group channels pending the resolution of overlapping service areas with other MDS licensees, protecting any co-channel pre-1983 ITFS receive sites.<sup>689</sup> Grand Alliance asserts that co-channel licensees should not be afforded new rights protecting new receive sites, or, as suggested by the Coalition, have any technical or other restrictions on their grandfathered operations lifted.<sup>690</sup> Grand Alliance reasons that other conclusions would be inconsistent with the Commission’s stated intent in the original orders reallocating the E and F channels to MDS and “freezing” incumbent ITFS operations on those channels.<sup>691</sup>

335. In response, the Department of Education, Archdiocese of New York (DOEANY) states that Grand Alliance’s argument effectively ignores the Commission’s determination extending protected service areas to all ITFS licensees, including E and F Group licensees, embodied in Section 74.903(d) of the Commission’s Rules, which states that ITFS licensees “must be protected from harmful electrical interference at each of [their] receive sites registered previously as of September 17, 1998, and within a PSA.”<sup>692</sup> Stanford, Northeastern University, and the Diocese of Brooklyn further argue that Grand Alliance’s proposal expands the rights of E/F Channel MDS licensees and revokes existing spectrum rights of grandfathered E/F Channel ITFS stations.<sup>693</sup> Region 10 argues that registered grandfathered receive sites should always be protected, including those outside current PSA boundaries.<sup>694</sup>

(Continued from previous page)

*Opinion and Order on Reconsideration*, 98 FCC 2d 129, 132-33 ¶ 12 (1983) (*E and F Group Reallocation Reconsideration Order*). See also 47 C.F.R. § 74.902(c).

<sup>685</sup> See *E and F Group Reallocation Reconsideration Order*, 98 FCC 2d at 132-33 ¶ 12 nn. 7, 8.

<sup>686</sup> *Id.*

<sup>687</sup> 47 C.F.R. § 74.902(c).

<sup>688</sup> See Grand Alliance Comments, DOEANY Reply Comments, Stanford & Northeastern Reply Comments, Brooklyn Reply Comments, and Coalition Reply Comments at 93-96.

<sup>689</sup> See Grand Alliance Comments at 9.

<sup>690</sup> See Grand Alliance Comments at 9.

<sup>691</sup> See Grand Alliance Comments at 9-10.

<sup>692</sup> See DOEANY Reply Comments at 1. Stanford, Northeastern University, and the Diocese of Brooklyn argue that Grand Alliance’s proposal expands the rights of E/F Channel MDS licensees and revokes existing spectrum rights of grandfathered E/F Channel ITFS stations. See Stanford, Northeastern and Brooklyn Reply Comments at 5-6.

<sup>693</sup> See Stanford, Northeastern and Brooklyn Reply Comments at 5-6.

<sup>694</sup> Region 10 Comments at 9; see *NPRM* at 6758-59 ¶ 88.

336. If grandfathered E and F Group ITFS licensees are not permitted to modify their equipment and MDS licensees must continue operating on a secondary basis, grandfathered E and F Group ITFS licensees will cause interference to low-power MDS co-channel licensees in some markets. Put another way, if MDS licensees that are on co-channel frequencies with grandfathered E and F Group ITFS licensees must avoid interfering with these frozen licensees, then the deployment of MDS broadband services may be hindered. Additionally, the grandfathered E and F Group ITFS licensees will never be able to transition to a low-power cellularized broadband system due to the restriction on modifying their equipment, which is presently contained in our rules.

337. We seek comment on how to modify our rules concerning grandfathered E and F channel ITFS stations in order to equitably allow both MDS and ITFS stations to provide advanced broadband wireless services. We ask whether it makes sense to adopt different approaches to different scenarios, rather than a one size fits all approach.

338. The first scenario that we envision is where the PSA of the grandfathered E and F Group ITFS licensee almost entirely overlaps the PSA of the co-channel MDS licensee. In this scenario, we seek comment on whether in keeping with the intent and spirit of the Commission's 1983 *E and F Group Reallocation Order* to free up spectrum for MDS,<sup>695</sup> we should require grandfathered E and F Group ITFS licensees to operate on a secondary non-interference basis to the co-channel MDS licensee. In the *E and F Group Reallocation Order*, the Commission stated that the two major public interest arguments favoring the authorization of multichannel MDS are efficiency and flexibility,<sup>696</sup> which are goals in the present proceeding in achieving the availability of new broadband technologies to all Americans as quickly as possible. If the grandfathered E and F Group ITFS licensees are to operate on a secondary non-interference basis to the co-channel MDS licensees we seek comment on whether the MDS licensees should bear the cost of relocating and/or coming to some other mutual arrangement with the grandfathered ITFS licensees that will adequately address the grandfathered ITFS licensees' concerns about being able to continue their operations.

339. Alternatively, we seek comment on allowing grandfathered E and F Group ITFS licensees to modify their equipment and be given a GSA, while the co-channel MDS operators would have to operate on a secondary non-interference basis. The *E and F Group Reallocation Order* seems to suggest that the Commission's intent in 1983 was to grandfather the E and F Group ITFS licensees forever. The Commission stated that "[e]xisting ITFS licensees (as well as existing permittees and applicants that eventually become licensees) of the reallocated channels would be grandfathered in perpetuity."<sup>697</sup>

340. A third approach would be to rely on voluntary negotiations between the parties. The Commission stated in 1983 that "[it] expect[s] that the MDS permittees and the ITFS users of the reallocated channels will negotiate in good faith to mutually accommodate each others' communications requirements."<sup>698</sup> Given the lack of progress in some markets between co-channel MDS licensee and grandfathered E and F Group ITFS licensee, we question whether continued reliance on negotiations would be appropriate. Nevertheless, we seek comment on whether there are changes we could make to

<sup>695</sup> See *E and F Group Reallocation Order*, 94 FCC 2d at 1228-29 ¶¶ 61 - 63.

<sup>696</sup> *Id.*

<sup>697</sup> See *id.* at 1247-8 ¶ 110.

<sup>698</sup> See *id.* at 1247-8 ¶ 110.

our rules that could make negotiations more effective.

341. The second scenario we envision is where the PSAs of the grandfathered E and F Group ITFS licensees overlap to some extent, but not as much as the in scenario one. We seek comment on whether, in that situation, we should adopt the same “splitting the football” mechanism we are using to separate other overlapping PSAs.<sup>699</sup> If we adopted that approach, co-channel MDS licensees and grandfathered E and F Group ITFS licensees would draw a boundary line through a “football” shaped area where the PSAs intersect, with each licensee agreeing to limit the interference it generates across the boundary and getting a GSA based on its prior PSA. We seek comment on whether this same approach makes sense in the co-channel BRS and grandfathered E and F Group ITFS licensee scenario as well. We also seek comment on the maximum amount of overlap under which the “splitting the football” approach would be practical.

342. We also seek comment on whether, as suggested by DOEANY and Region 10, we should continue to afford protection to grandfathered ITFS E and F group receive sites that fall outside the new GSAs. We note that in other contexts, we have declined to protect receive sites outside GSAs. We seek comment on whether there is any reason to treat grandfathered E and F channel ITFS stations differently.

343. Finally, the third and last scenario we envision is that where the grandfathered E and F Group ITFS licensee remains frozen, unable to modify its system, and there is no co-channel MDS licensee. We seek comment on allowing the grandfathered E and F Group ITFS licensee to modify and to assign their facilities where there is no co-channel MDS licensee. We believe that allowing such freedom may facilitate innovative new educational broadband service offerings.

#### **D. Limitation on Channel Assignments for EBS Licensees**

344. Section 74.902(d)(1) of the Commission’s Rules (the Four-Channel Rule) limits a licensee “to the assignment of no more than four channels for use in a single area of operation, all of which should be selected from the same [channel] Group . . . .”<sup>700</sup> The rules prohibit applicants from reserving additional channels by applying for more channels than they intend to construct within a reasonable time, simply for the purpose of reserving additional channels.<sup>701</sup> Rather, the number of channels authorized to an applicant must be based on the demonstration that the licensee needs the number of channels requested.<sup>702</sup> In making such an assessment, the Commission considers such factors as the amount of use of any currently assigned channels and the amount or proposed use of each channel requested, the amount of, and justification for, any repetition in the schedules, and the overall demand and availability of ITFS channels in the community.<sup>703</sup>

345. We note that the transition plan we have adopted today contemplates situations that would be inconsistent with continued application of the four-channel rule. For example, an ITFS licensee that wished to continue high-power operations using four channels in the MBS could receive the high-power channel in four different channel groups, which under our current rules would be prohibited.

<sup>699</sup> See discussion of splitting of the football and geographic area licensing in general at Section IV.A.4.b, *supra*.

<sup>700</sup> 47 C.F.R. § 74.902(d)(1) (1993).

<sup>701</sup> *Id.*

<sup>702</sup> *Id.*

<sup>703</sup> *Id.*



Because the record demonstrates a significant level of support for the Coalition's transition plan, including the ability to "swap" channels with other licensees in the same geographic region, we believe that the record supports our decision not to apply the four-channel rule in those areas that have transitioned. No party argued that the Coalition's transition plan was inappropriate because it would require changes to the four-channel rule. Accordingly, we conclude that the four-channel rule does not apply in those MEAs that have transitioned.

346. We seek comment on eliminating the four-channel rule in markets that have not yet transitioned. The purpose of the four-channel rule has been "to provide as many educators as possible with the opportunity to operate ITFS systems that meet their educational needs."<sup>704</sup> At the time the four-channel rule was established, ITFS was limited to video broadcast uses. Given the wider range of services that ITFS can now be used for and the changes to our leasing rules, it appears that the four-channel rule may unduly limit the ability of educational institutions and organizations to take full advantage of the potential of ITFS. We are also concerned that the four-channel rule may require that spectrum lay fallow when an educator wishes to use the spectrum. Furthermore, in those markets where all ITFS spectrum is assigned, the four-channel rule may artificially limit the ability to assign spectrum to educators who are in a better position than the existing licensee to utilize the spectrum. Commenters supporting retention of the four-channel rule should explain why they believe the rule is appropriate and necessary given the current market and regulatory conditions.

#### **E. Wireless Cable Exception to EBS Eligibility Restrictions**

347. In 1990, the Commission initiated a proceeding to review and simplify disparate technical, procedural, ownership and other requirements and restrictions in the three microwave radio services used in the provision of wireless cable service – MDS, ITFS, and OFS.<sup>705</sup> By affording wireless cable operators a more accommodating regulatory framework, the Commission aimed to enhance the potential of wireless cable as a competitive force in the multichannel video distribution marketplace. At the same time, the Commission wished to ensure that ITFS continued to be a useful tool for providing educational opportunities.<sup>706</sup>

348. As part of the Commission's effort to enhance the potential of wireless cable as a competitive force in the multichannel video distribution marketplace, the Commission proposed to allow wireless cable entities to be licensed on vacant ITFS channels under certain circumstances. On October

<sup>704</sup> Amendment of Part 74 of the Commission's Rules with Regard to the Instructional Television Fixed Service, MM Docket No. 93-24, *Report and Order*, 10 FCC Rcd 2907, 2914 ¶ 39 (1995).

<sup>705</sup> See Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Cable Television Relay Service, Gen. Docket No. 90-54, *Second Report and Order*, 6 FCC Rcd 6792 at ¶ 1 (1990) (*Second Report and Order*) (citing Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Cable Television Relay Service, Gen. Docket Nos. 90-54 and 90-113, *Notice of Proposed Rule Making and Notice of Inquiry*, 5 FCC Rcd 971 (1990)).

<sup>706</sup> *Second Report and Order* at ¶ 1 (citing Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service, Gen. Docket Nos. 90-54 and 90-113, *Report and Order*, 5 FCC Rcd 6410 (1990)).

25, 1991, the Commission adopted a proposal to permit use of available ITFS channels by wireless cable entities.<sup>707</sup> This proposal was implemented in the *Second Report and Order* as Section 74.990 of the Commission's Rules. In order to ensure that wireless cable use did not have a negative impact upon ITFS, the Commission established a series of requirements that must be met before ITFS channels could be used for wireless cable use.<sup>708</sup> In order for commercial operators to take advantage of ITFS frequencies, at least 8 ITFS channels must remain available in the community.<sup>709</sup> Also, there can be no co-channel ITFS station within 50 miles of the proposed system.<sup>710</sup> If an ITFS applicant applies at the same time as the commercial operator, the ITFS applicant automatically wins.<sup>711</sup>

349. Although we sought comment on eligibility issues, no party specifically commented on the "wireless cable" exception to the ITFS/EBS eligibility issue. We conclude that this rule should not apply to EBS post-transition. We believe that the changes we have made to our rules, especially the inclusion of BRS and EBS in our secondary market rules, provides commercial operators with sufficient access to BRS spectrum. We note that this rule could be difficult to apply in the context of geographic area licensing. Given that EBS-eligible licensees have not been able to apply for new stations in this band since 1995, we believe the better action is to restrict access to ITFS frequencies after the transition to educational institutions and non-profit educational organizations.

350. In the absence of a record, we seek further comment on whether retain the rule at this time for markets that have not transitioned. Regardless of our ultimate decision, we will grandfather existing licenses granted pursuant to these rules. Such licenses may continue to be renewed and assigned.

#### **F. Regulatory Fee Issues**

351. Section 9 of the Communications Act<sup>712</sup> requires the Commission to assess regulatory fees to recover the costs associated with the Commission's enforcement, policy and rulemaking, user information, and international activities.<sup>713</sup> Below, we seek comment on a new methodology to assess regulatory fees based on the scope of a BRS licensee's authorized spectrum use rather than our current approach of assessing a flat fee per call sign. We also seek comment on our tentative conclusion to apply this updated methodology to ITFS licensees to the extent they are not statutorily exempt from regulatory fees because of their status as governmental or nonprofit entities. Specifically, and as explained in more detail below, we seek comment on a proposed fee methodology that would account for the benefits of an EBS or BRS spectrum authorization based on metrics, such as covered population (MHz/pops) or area

<sup>707</sup> *Second Report and Order* at ¶ 4 and ¶¶ 42-58; see also *Second Report and Order* at Appendix C; 47 C.F.R. § 74.990 (1991).

<sup>708</sup> See 47 C.F.R. § 74.990.

<sup>709</sup> See 47 C.F.R. § 74.990(a).

<sup>710</sup> *Id.*

<sup>711</sup> See 47 C.F.R. § 74.990(e).

<sup>712</sup> 47 U.S.C. § 159. Section 9 was enacted by Congress in 1993. See Pub. L. No. 106-553.

<sup>713</sup> 47 U.S.C. § 159(a).

<sup>716</sup> See *NPRM*, 18 FCC Rcd at 6796-7 ¶¶ 183-185.

(MHz/km<sup>2</sup>), to account for the bandwidth and the potential population or area that could be served.

352. *Background.* In the *NPRM*, we asked whether we should treat BRS and ITFS applicants and licensees differently for fee purposes.<sup>716</sup> We asked whether ITFS licensees and applicants should become subject to regulatory fees, to the extent that such licensees or applicants do not fall within an express statutory exemption.<sup>717</sup> We noted that MDS and ITFS licensees often provide service as part of the same system, and that ITFS licensees presently can lease up to ninety-five percent of their capacity to other entities (usually MDS licensees).<sup>718</sup> In light of these factors and the contemplated changes to our rules that could result in further equality among MDS and ITFS licensees, we sought comment on our tentative conclusion that regulatory fees for MDS and ITFS licensees should be identical. Finally, we sought comment on possibly changing the regulatory fee structure applicable to MDS licensees.<sup>720</sup>

353. Several parties commented on regulatory fee issues.<sup>721</sup> AHMLC states that it is inequitable not to assess fees on ITFS licensees on the grounds that they are non-commercial when, in fact, they often lease up to 95% of their capacity to commercial MDS licensees, which must pay fees. AHMLC therefore asserts that to the extent ITFS fees are not statutorily barred,<sup>722</sup> we should treat commercial ITFS licensees the same as their competitors.<sup>723</sup> By contrast, the Coalition argues that ITFS licensees should be exempt from regulatory fees because most would be exempt as a result of their governmental or nonprofit status.<sup>724</sup> The Coalition also argues that we should treat MDS like WCS for regulatory fee purposes, and include it in the CMRS Mobile Service fee category.<sup>725</sup> The Coalition asserts that the ability to offer CMRS was dispositive in classifying WCS for regulatory fee purposes, and it should be so for MDS. Grand Wireless argues that regulatory fees are particularly onerous for rural operators because, on a per population basis, the fees can amount to multiple times that of fees paid by urban licensees. Grand Wireless therefore asserts that a sliding fee—based upon population density—would more equitably distribute fees.<sup>726</sup>

354. In the *NPRM* we sought comment on how to treat MDS and ITFS applicants and licensees for fee purposes.<sup>727</sup> We sought comment on whether ITFS licensees and applicants should become subject to application fees and regulatory fees, to the extent that such licensees or applicants do

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<sup>717</sup> *Id.* at ¶ 184.

<sup>718</sup> *Id.*

<sup>720</sup> See *NPRM*, 18 FCC Rcd at 6797 ¶ 185.

<sup>721</sup> See AHMLC Comments at 8, BellSouth Comments at 13-14 n.21, *Coalition* Comments at 140-141, and Grand Wireless Comments at 3, 13.

<sup>722</sup> Governmental and nonprofit entities are statutorily exempt from Section 9 regulatory fees. 47 U.S.C. § 159(h).

<sup>723</sup> See AHMLC Comments at 8. AHMLC also asserts that moving to a GSA licensing model should help reduce fees, and that licensees should be permitted to consolidate station sites in single markets into a single license to avoid multiple renewal and other future call sign-based filings. *Id.*

<sup>724</sup> See *Coalition* Comments at 140.

<sup>725</sup> See *id.* at 140-141.

<sup>726</sup> See Grand Wireless Comments at 3, 13.

<sup>727</sup> See *NPRM*, 18 FCC Rcd at 6796-97 ¶¶ 183-185.

not fall within an express statutory exemption.<sup>728</sup> We noted that MDS and ITFS licensees often provide service as part of the same system, and that ITFS licensees presently can lease up to ninety-five percent of their capacity to other entities (usually MDS licensees). In light of these factors and given the proposed rule changes in the *NPRM* that focused on regulatory parity among MDS and ITFS licensees,<sup>729</sup> we sought comment on our tentative conclusion that, to the extent that we determine that ITFS licensees should pay regulatory fees, the regulatory fees for MDS and ITFS licensees should be identical. Finally, we sought comment on changing the regulatory fees applicable to MDS licensees.<sup>730</sup>

355. *Discussion.* Several parties commented on regulatory fees issues and these commenters generally disagree whether ITFS and MDS should pay the same regulatory fee.<sup>731</sup> In light of the comments received in this proceeding regarding fees and our decisions today that confirm EBS as a service distinct from BRS, we have elected to seek further comment on this issue. In our FY 2004 Regulatory Fees proceeding, we have proposed to continue to assess a regulatory fee of \$270 for each BRS call sign.<sup>732</sup> We will therefore assess former MDS licensees in the BRS/EBS spectrum the regulatory fee amount determined in the FY 2004 Regulatory Fee proceeding. Because current EBS licensees are not subject to application and regulatory fees under the Commission's rules, and because most such licensees are exempt from fees as non-profit corporations or governmental institutions, we have determined that EBS licensees will not be subject to regulatory and application fees at this time. In future years, however, we believe the public interest would be better served by assessing BRS/EBS regulatory fees based on the scope of a licensee's authorized spectrum use.

356. Continuing to define regulatory fee categories based simply on a "type of service" scheme may no longer serve the public interest. We are sensitive to Grand Wireless's concern that rural licensees may be disadvantaged by having to pay the same regulatory fees as their urban counterparts whose licenses often cover a much greater population. Technological advances and the increased flexibility that the Commission has provided to ITFS licensees in this proceeding moreover have made their spectrum more fungible with MDS spectrum. Indeed, technological advances in recent years enable licensees utilizing distinct, but relatively close, frequency bands to provide services that are virtually indistinguishable to customers.<sup>733</sup> Rather than adopt service-based fee categories for MDS and ITFS, we intend to eliminate fee differences between these services that currently have similar spectrum benefits.<sup>734</sup>

<sup>728</sup> Governmental entities are statutorily exempt from Section 8 fees, and both governmental entities and nonprofit entities are statutorily exempt from Section 9 fees. 47 U.S.C. §§ 158(d)(1), 159(h).

<sup>729</sup> See *NPRM*, 18 FCC Rcd at 6742 ¶ 41.

<sup>730</sup> See *id.* at 6797 ¶ 185.

<sup>731</sup> See AHMLC Comments at 8 (to the extent ITFS fees are not statutorily barred, treat commercial ITFS licensees the same as their competitors), BellSouth Comments at 13-14 n.21, *Coalition* Comments at 140-141 (ITFS licensees should be exempt from regulatory fees because most would be exempt as a result of their governmental or nonprofit status; MDS should be treated like WCS for regulatory fee purposes and included in the CMRS Mobile Service fee category), and Grand Wireless Comments at 3, 13.

<sup>732</sup> In the Matter of Assessment and Collection of Regulatory Fees for Fiscal Year 2004, MD Docket No. 04-73, *Notice of Proposed Rule Making*, 19 FCC Rcd 5795 (2004).

<sup>733</sup> For example, due to the advent of improved signal processing and silicon technologies, cellular mobile operations once limited to bands below 1 GHz, are now technically feasible in the 1.9 GHz band (Personal Communication Services).

<sup>734</sup> We note that several different types of microwave services have dissimilar general characteristics and, hence, dissimilar spectrum benefits, yet are subject to the same fee. For example, various private and common carrier (continued....)

If we adopt a new fee methodology, licensees should be able to determine their fee obligations through a simple calculation, based predominantly on fixed, known variables.<sup>735</sup>

357. We propose a methodology to assess regulatory fees based on the scope of an BRS or EBS licensee's authorization and the benefits provided to licensees thereunder in accordance with Section 9(b)(3) and Section 9(b)(1)(a) of the Act.<sup>736</sup> Section 9(b)(1)(A) requires that fees "be adjusted to take into account factors that are reasonably related to the benefits provided to the payer of the fee by the Commission's activities, including such factors as service area coverage, shared use versus exclusive use, and other factors that the Commission determines are necessary in the public interest."<sup>737</sup> Section 9(b)(3) further provides that permissive amendments to the regulatory fee schedule shall "reflect additions, deletions, or changes in the nature of [our] services as a consequence of Commission rulemaking proceedings or changes in law."<sup>738</sup> Our goal is to ensure comparable treatment of similarly situated BRS/EBS licensees based on factors more reasonably related to the benefits they receive under their spectrum authorizations rather than assessing a flat fee per call sign.

358. Assessing fees based on the benefits of spectrum requires that we quantify and measure those benefits to the greatest extent possible. In addition to the coverage area and the extent of exclusivity specified in Section 9(b)(1)(A), we invite comment on other factors that would enable us to approximate better the benefits of a spectrum authorization and that are necessary in the public interest. Specifically, we seek comment on a proposed fee methodology that would account for the benefits of an BRS/EBS spectrum authorization based on metrics, such as covered population (MHz/pops) or area (MHz/km<sup>2</sup>), to account for the bandwidth and the potential population or area that could be served. A metric such as MHz/pops, which we have used in spectrum auctions to determine upfront payment amounts and bidding eligibility,<sup>739</sup> would account more precisely for the relative benefits of a particular spectrum authorization.

359. We propose that any metric that we adopt be applied consistently to all BRS/EBS licensees. Commenters should address the costs and benefits of adopting a metric based upon covered population (MHz/pops), square kilometers (MHz/km<sup>2</sup>), some combination of these measures, or any other method of calculating the licensee's regulatory fee. We seek comment on the ability of such metrics to accurately measure the benefits of the spectrum underlying a given authorization. A metric based on the size of the area that an authorization covers might undervalue spectrum in small, densely populated urban

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point-to-point links are licensed with various sized channels such as a 5 MHz, 20 MHz, or a 40 MHz channel and can only operate over that one link, whereas some licensees have geographic license areas, yet common carrier and private microwave fee categories were both subject to an annual regulatory fee of \$25 per license in FY 2003. The types of benefits received from these different services do not relate in a methodical way to fees owed.

<sup>735</sup> If the total amount of regulatory fees that Congress requires us to collect varies each year, which in the past has increased on average by no more than 11.2 percent, this would be the only variable that would be less predictable. This average does not reflect the fee increase from FY 1994 to FY 1995. The FY 1994 fees covered a partial year and the percentage increase in fees from FY 1994 to FY 1995 therefore was atypically high, 84.76 percent.

<sup>736</sup> 47 U.S.C. §§ 159(b)(3) and (b)(1)(A).

<sup>737</sup> 47 U.S.C. § 159(b)(1) (emphasis added).

<sup>738</sup> 47 U.S.C. § 159(b)(3).

<sup>739</sup> See *Public Notice*, "Auction of C, D, E, and F Block Broadband PCS Licenses Notice and Filing Requirements for Auction of C, D, E, and F Block Broadband Personal Communications Services Licenses Scheduled for March 23, 1999 Minimum Opening Bids And Other Procedural Issues," Report No. Auc-98-22-C (Auction No. 22), DA 98-2604 13 FCC Rcd 24540 (rel. Dec. 23, 1998).

areas relative to large, sparsely populated rural areas. Metrics driven by the ratio of spectrum to population similarly also might undervalue spectrum in urban areas. Another approach, similar to that applied to regulatory fees for television stations, would be to group categories of licenses by market rank as determined by the population of the market served or geographic licensed service area. We also seek comment on a proposed metric's ability to logically and consistently rank the benefits of spectrum authorizations.

### G. Gulf of Mexico Proceeding

360. In the *NPRM*, we incorporated the docket of the ongoing Gulf of Mexico proceeding, wherein the Commission proposed to establish a GSA in the Gulf of Mexico known as the "Gulf Service Area," subject to the same rules as the service areas established in the *Report and Order*, with certain limitations.<sup>740</sup> This rulemaking was initiated by Gulf Coast MDS Service Company ("Gulf Coast"), which sought to have the Gulf of Mexico treated as one service area with MDS and ITFS licenses assigned by competitive bidding.<sup>741</sup> PetroCom License Corporation ("PetroCom"), Gulf Coast's successor in interest, continues to request that the Commission establish a service area in the Gulf of Mexico using the *Report and Order* as a model,<sup>742</sup> but opines that the Commission should only authorize two licenses in the area and adopt eligibility restrictions to avoid excessive concentration of licenses.<sup>743</sup>

361. As noted in the *NPRM*, commenters generally supported the creation of a Gulf Service Area.<sup>744</sup> However, some commenters expressed concern over the timing of the adoption of rules for the service area due to certain technical and economic aspects of the proposal.<sup>745</sup> These commenters sought to

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<sup>740</sup> Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico, *Notice of Proposed Rulemaking*, WT Docket No. 02-68, 17 FCC Rcd 8446 (2002) (*Gulf Notice* or *Gulf of Mexico MDS NPRM* or *Gulf NPRM*). That proceeding was incorporated alongside the matter of Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Services in the 2150-2162 and 2500-2690 MHz Bands. *NPRM*, 18 FCC Rcd at 6759 ¶ 91 (2003) (*NPRM*). See *Gulf Notice*, 17 FCC Rcd at 8447 ¶ 2.

<sup>741</sup> Petition for Rulemaking of Gulf Coast MDS Service Company (Gulf Coast Petition) (May 21, 1996).

See *NPRM*, 18 FCC Rcd at 6759 ¶ 91; see also Gulf Coast Petition. See also Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service, *Report and Order*, 10 FCC Rcd 9589, 9608-17 ¶¶ 34-55 (1995) (*MDS Report and Order*).

<sup>742</sup> See Amended Petition at 4. "In the *MDS Report and Order*, the Commission adopted a licensing plan under which it assigned, through a simultaneous multiple round bidding process, one MDS authorization for each of the 487 BTAs and six additional geographic areas" as defined in Rand McNally's 1992 *Commercial Atlas and Marketing Guide*. *NPRM*, 18 FCC Rcd at 6759 ¶ 89, n.190 (citing *MDS Report and Order*, 10 FCC Rcd at 9608-09 ¶¶ 34-37). BTA authorization holders may construct facilities to provide service over any usable MDS channel within the BTA, although, such channels are only usable subject to the Commission's interference standards. *MDS Report and Order*, 10 FCC Rcd at 9608-18 ¶¶ 34-55.

<sup>743</sup> See *NPRM*, 18 FCC Rcd at 6759 ¶ 92 (citing Amended Petition for Rulemaking of PetroCom License Corporation (Amended Petition) (Nov. 23, 1998)).

<sup>744</sup> See *id.* at 6760 ¶¶ 92-93.

<sup>745</sup> See *id.* at 6760 ¶ 93. See, e.g., PetroCom Comments at 3-5; Stratos Offshore Services Company at 2-3 (Stratos Offshore); WCA Comments at 4; PetroCom Reply Comments at 1-4; Sprint Reply Comments at 31.

delay the licensing of MDS in the Gulf of Mexico until after the Commission addressed the Coalition's proposals<sup>746</sup> and until the Commission established service rules.<sup>747</sup> However, because the rapid development and deployment of services to as many areas and populations as prudently possible is an important goal in this proceeding, in the *NPRM*, we adopted the proposal to create a Gulf service area because such a preliminary step "would not have to wait for the adoption of final rules in the proceeding."<sup>748</sup> We believed that to delay acting without having encountered any commenter opposition to the proposal would unnecessarily hinder the needs of businesses and consumers in the Gulf of Mexico region.<sup>749</sup> We agreed with the Gulf Coast Petition that establishing the Gulf Service Area "would allow specialized businesses that operate in the Gulf of Mexico to obtain advanced communication services that are currently unavailable to them" and thus operate more efficiently.<sup>750</sup>

362. While we proposed to create the Gulf Service Area for MDS services, we also proposed in the *Gulf Notice* to exclude all ITFS channels from licensing in the Gulf service area.<sup>751</sup> Our proposal was based on the fact that ITFS licensees had not expressed interest in seeking licenses to operate in the Gulf of Mexico, the area most likely had little need for educational service, and the requested commercial use did not require the full bandwidth available in the 2500-2690 MHz band.<sup>752</sup> We sought comment on this proposal and on whether we should consider unlicensed uses in the Gulf of Mexico.<sup>753</sup> We did not receive comment on these proposals, and therefore renew our request for feedback on these issues.

363. We noted in the *NPRM* that the Gulf Service Area does not have a significant population center and is based primarily on the geographic confines of the Gulf and on the likely commonality of commercial interests among the potential users in the Gulf.<sup>754</sup> Therefore, we believe that setting the proper geographic boundaries for the Gulf Service Area is particularly important as we seek to ensure the best possible service both inside the GSA and in neighboring service areas. In the *Gulf Notice*, the Commission proposed to use the same boundary definitions as adopted in the *WCS Report and Order*.<sup>755</sup> Pursuant to this approach, land-based license regions neighboring the Gulf area would extend to the limit of United States territorial waters in the Gulf of Mexico, which extend to the maritime zone approximately

<sup>746</sup> See *WCA Comments* at 4; *Stratos Offshore Comments* at 3.

<sup>747</sup> See *PetroCom Comments* at 3-5; *PetroCom Reply Comments* at 1-4. See also *NPRM* at ¶ 93.

<sup>748</sup> See *NPRM*, 18 FCC Rcd at 6761 ¶ 93.

<sup>749</sup> See *id.*

<sup>750</sup> See *id.* We note that the Gulf of Mexico area is a strong example of an underserved area where, for a lack of any significant population center, service has not been built out. Calls for delaying the creation of the proposed Gulf Service Area, without any indication that adverse consequences will result from this step alone, frustrates the Commission's goal of the rapid, nationwide deployment of services to areas and populations in need. See also Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS"), GN Docket No. 96-228, *Report and Order*, 12 FCC Rcd 10785, 10816 ¶ 59 (1997) (*WCS Report and Order*) ("[C]reating a service area for the Gulf of Mexico region will help meet the growing communications needs of businesses operating in the Gulf.").

<sup>751</sup> See *Gulf Notice*, 17 FCC Rcd at 8450 ¶ 13. See also *NPRM* at 6761 ¶ 94.

<sup>752</sup> See *Gulf Notice*, 17 FCC Rcd at 8450 ¶ 13.

<sup>753</sup> See *NPRM*, 18 FCC Rcd at 6761 ¶ 94.

<sup>754</sup> See *id.* at 6761 ¶ 95.

<sup>755</sup> See *Gulf Notice*, 17 FCC Rcd at 8453 ¶ 18. See also *WCS Report and Order*, 12 FCC Rcd at 10816.

twelve nautical miles from the United States coastline.

364. PetroCom disagrees with the Commission's proposal to establish the demarcation line of the Gulf Service area at twelve nautical miles from the coastline and maintains that the better approach is to define the Gulf Service Area boundaries as the land-water line.<sup>756</sup> PetroCom points out that the land-water line was adopted as the boundary for cellular services.<sup>757</sup> Furthermore, PetroCom asserts that a shoreline boundary mirrors Commission rules regarding BTAs, as defined by Rand McNally, where boundaries follow county lines.<sup>758</sup> PetroCom argues that current MDS and ITFS licensees provide fixed services that do not require protection beyond the shore,<sup>759</sup> and that allowing land-based MDS and ITFS operations to extend into the Gulf will create interference problems for prospective Gulf licensees.<sup>760</sup> Thus, PetroCom implies that the Commission proposal to follow the *WCS Report and Order* boundary definitions will benefit incumbent land-based licensees at the expense of potential entrants, and discourage Gulf licensees from fully developing their systems.<sup>761</sup>

365. The Coalition disagrees with the Commission's decision to immediately establish the Gulf Service Area.<sup>762</sup> The Coalition further argues that any future operations in the Gulf must not adversely impact land-based services using the 2.5 GHz band. Noting that the 35-mile radii allotted to PSAs may extend well into the Gulf,<sup>763</sup> the Coalition argues that existing BTAs and PSAs must be fully protected.<sup>764</sup> WCA also contends that county line boundaries forming the basis for BTA boundary definitions extend into the Gulf as well, contrary to PetroCom's assertions.<sup>765</sup> Therefore, the Coalition supports a Gulf Service Area boundary beginning approximately twelve miles from shore.<sup>766</sup> The Coalition suggests further that any area between the Gulf Service Area and existing land-based service areas should be designated a Gulf Coastal Zone and that both the Gulf Service Area provider and the adjacent land-based service provider should be permitted to offer service therein.<sup>767</sup> We seek additional comment on the merits of the boundary definitions proposed by both PetroCom and the Coalition.

366. Sprint is similarly concerned that Gulf operations could interfere with its own land-based operations.<sup>768</sup> Therefore, Sprint also favors defining the boundary for the Gulf Service Area as twelve

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<sup>756</sup> See PetroCom Comments at 5-6.

<sup>757</sup> See PetroCom Comments at 5-6 (citing Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico, *Report and Order*, 17 FCC Rcd 1209, 1219 ¶ 31 (2001) (*Gulf Cellular Order*)).

<sup>758</sup> See PetroCom Comments to the Amended Petition at 4.

<sup>759</sup> See PetroCom Comments at 6.

<sup>760</sup> See PetroCom Reply Comments at 5.

<sup>761</sup> See PetroCom Reply Comments at 5.

<sup>762</sup> See WCA Comments at 74.

<sup>763</sup> See WCA Comments at 79.

<sup>764</sup> See WCA Comments at 74.

<sup>765</sup> See WCA Comments at 79-80.

<sup>766</sup> See WCA Comments at 80.

<sup>767</sup> See WCA Comments at 81.

<sup>768</sup> See Sprint Comments at 15-16.



nautical miles from the coastline.<sup>769</sup> Sprint further shares the Coalition's concern that a particular interference problem known as "ducting" may be caused by operations in the Gulf Service Area.<sup>770</sup> We seek additional comment on the ducting propagation phenomenon. For example, how often does ducting occur and will there be ducting of inland signals? Can any steps be taken to minimize the adverse impacts of signal propagation?

367. As previously noted, commenters requested that the Commission delay considering the issues presented in the *Gulf Notice* until after the Commission considered the Coalition proposal to transform the service.<sup>771</sup> We remain concerned that the record is not sufficiently developed to resolve issues concerning the amount of spectrum to license in the Gulf Service Area, competitive bidding, partitioning and disaggregation, interference protection requirements, construction periods, and license term. Therefore, we renew our request for comment on these and the other issues discussed herein.

## H. Streamlining FCC Review of Transactions

368. As discussed in Section III.B.4, we expect that the transition to the new band plan will be implemented swiftly, and we anticipate that proponent-driven transition plans are likely to involve the assignment, partitioning, disaggregation, and leasing of spectrum usage rights in order to rationalize new spectrum holdings. We seek comment generally on ways to streamline our current procedures for reviewing these transactions to facilitate more efficient transitions.

369. We note that we have taken steps to simplify the licensing process and remove unnecessary regulatory burdens by standardizing a number of MDS and ITFS practices and procedures. For example, once mandatory electronic filing in ULS is in place, MDS and ITFS licensees will use FCC Form 603 and associated schedules to apply for consent to assignment of existing authorizations (including channel swaps), to apply for Commission consent to the transfer of control of entities holding authorizations, to notify the Commission of the consummation of assignments or transfers, and to request extensions of time for consummation of assignments or transfers. We seek comment on whether additional streamlining of the filing or review process for transfers and assignments, as well as spectrum leases, should be implemented. In addition, in Section IV.D.6, we decided to permit partitioning and disaggregation for both ITFS and MDS licensees. We seek comment on whether the procedures set forth in Section 21.931 and Section 1.948 of our rules permit sufficiently streamlined notification and review. We seek comment on any other ways to streamline our procedures for transactions involving MDS and ITFS licensees.

## I. Continuing Review of Progress Towards Policy Goals

370. *Background.* In the *R&O*, we have taken a series of actions to further our broadband and spectrum policy goals. Perhaps the most fundamental action we took was to adopt a radically altered band plan in order to facilitate the development of wireless broadband systems and to reduce the likelihood of interference caused by incompatible uses. We have also adopted a streamlined transition plan designed to facilitate a rapid transition to the new band plan while preserving the existing uses in the band. In addition, we have retained the EBS eligibility requirements in order to protect and promote existing and new educational uses in the band. We have also taken various other actions to facilitate the development

<sup>769</sup> See Sprint Comments at 15-16.

<sup>770</sup> See Sprint Comments at 15-16. See also WCA Comments at 74-78.

<sup>771</sup> See *NPRM*, 18 FCC Rcd at 6762 ¶ 97.

of advanced broadband and educational systems and to eliminate outdated and burdensome rules on our licensees. While we are asking for broad policy information in response to this aspect of the *FNPRM*, we do not intend to revisit the policy decisions we have made in the *R&O*. Our purpose in asking these questions is to gather information that will allow us to monitor developments in the band to ensure that we are responsive to future changes.

371. The goals we seek to accomplish in this proceeding, however, are not short term. Rather, we seek long-term and sustainable changes in this band. Indeed, as explained in the *R&O*, we believe that the changes we have implemented will unlock much of the promise in this band. Given the importance of lasting transformation of this band, we believe it is important to actively review the state of development in this band to ensure that the measures we have adopted today accomplish our stated policy goals. We are committed to ensuring that the Commission takes an active role in assessing whether our policy goals remain appropriate and, more importantly, whether the specific rules we have adopted are appropriately tailored to meet our policy goals. In that regard, we seek comment on various issues relating to the future of BRS and EBS.

372. *Discussion.* Given the many difficulties that licenses have traditionally faced in deploying services in this band, we believe it is particularly important in this proceeding that we continue to actively monitor the state of deployment in this band. In order to keep fully informed, we seek comment on the future trends that licensees, equipment manufacturers, and other stakeholders expect for BRS and EBS. For example, we ask licensees that currently use BRS or EBS for high-power operations to provide their expectations as to how long they expect the MBS will be used for high-power operations. We will continue to monitor progress in the use of BRS in providing advanced wireless broadband services, as well as the success of EBS in meeting their educational mission. We invite comments on how we can continue to ensure that the Commission's licensing policies truly support that important educational aim. It is critical that the Commission's rules and policies concerning BRS and EBS facilitate deployment of services to educational institutions, students, and broadband services to consumers generally. Time is of the essence. We understand that both the demand and the technology is there for a third broadband pipe into the home. We expect that licensees will aggressively take advantage of the opportunities we are creating today to offer advanced and innovative services to customers and students. Efficient use of spectrum is of paramount importance. We will closely monitor deployment to determine whether changes are necessary down the road and whether the rules and policies we have adopted continue to have a nexus to our laudable goals.

373. We intend to closely monitor the marketplace to determine whether the rules we have adopted are serving their intended purpose. We strongly anticipate that as a result of the rules we are adopting today, this band will be much more intensively utilized by commercial interests, educational interests, and other entities. We seek comment on the type of information we should track in order to monitor deployment, as well as information that would help us to identify obstacles to deployment. To the extent that deployment is not taking place in the band, we intend to thoroughly review the situation and consider appropriate changes to our rules. For example, if BRS and EBS spectrum is being underutilized, there could be several possible causes for that underutilization. Further revisions could be necessary to our technical rules. Alternatively, continued technological and market developments could have unanticipated effects on this band. We ask commenters to provide examples of the types of information that the Commission should look at to determine whether our rules are working as intended.

374. We recognize that the ultimate success in recreating this band is also closely linked to the availability of investment dollars in support of wireless broadband services. We believe that our rules create a more stable environment that will promote additional capital investment. However, we seek comment on whether there are additional actions that we can take that will compel additional investment.

At the same time, we seek comment on whether there are any actions that we are taking that may hinder or provide disincentives to investment.

## VI. PROCEDURAL MATTERS

### A. *Ex Parte* Rules – Permit-But-Disclose

375. This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed pursuant to the Commission's rules.<sup>772</sup>

### B. Comment Period and Procedures

376. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules,<sup>773</sup> interested parties may file comments on this Notice on or before [30 days from publication in the Federal Register], and reply comments on or before [60 days from publication in the Federal Register]. Comments and reply comments should be filed in WT Docket No. 03-66, and may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.<sup>774</sup> All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding.

377. Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket number. Parties may also submit an electronic comment by e-mail via the Internet. To obtain filing instructions for e-mail comments, commenters should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and should include the following words in the body of the message: "get form <your e-mail address>." A sample form and directions will be sent in reply.

378. Parties who choose to file by paper must file an original and four copies of each filing. If parties want each Commissioner to receive a personal copy of their comments, they must file an original plus nine copies. All filings must be sent to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Room TW-A325, Washington, D.C. 20554. Furthermore, parties are requested to provide courtesy copies for the following Commission staff: (1) Nancy Zaczek, Genevieve Ross, and Stephen Zak, Broadband Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, S.W., Room. 3-C124, Washington, D.C. 20554; and (2) William Huber and Erik Salovaara, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, S.W., Room. 4-A760, Washington, D.C. 20554. One copy of each filing (together with a diskette copy, as indicated below) should also be sent to the Commission's copy contractor, Best Copy and Printing, Inc, 445 12th Street, SW, Room CY-B402, Washington, DC, 20554, 1-800-378-3160.

379. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be attached to the original paper filing submitted to the Office of the Secretary. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using

<sup>772</sup> See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206.

<sup>773</sup> See 47 C.F.R. §§ 1.415, 1.419.

<sup>774</sup> Electronic Filing of Documents in Rulemaking Proceedings, *Report and Order*, 13 FCC Rcd 11322 (1998).

Microsoft TM Word 97 for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding, type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters should send diskette copies to the Commission's copy contractor, Qualex International, 445 12th Street, SW, Room CY-B402, Washington, DC, 20554, 202-863-2893.

380. The public may view the documents filed in this proceeding during regular business hours in the FCC Reference Information Center, Federal Communications Commission, 445 12th Street, S.W., Room CY-A257, Washington, D. C. 20554, and on the Commission's Internet Home Page: <<http://www.fcc.gov>>. Copies of comments and reply comments are also available through the Commission's duplicating contractor: Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC, 20554, 1-800-378-3160. Accessible formats (computer diskettes, large print, audio recording and Braille) are available to persons with disabilities by contacting Brian Millin, of the Consumer & Governmental Affairs Bureau, at (202) 418-7426, TTY (202) 418-7365, or at [bmillin@fcc.gov](mailto:bmillin@fcc.gov).

### **C. Final Regulatory Flexibility Analysis**

381. The Regulatory Flexibility Act (RFA)<sup>775</sup> requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."<sup>776</sup> Accordingly, we have prepared a Final Regulatory Flexibility Analysis concerning the impact of the rule changes contained in this R&O on small entities. The Final Regulatory Flexibility Analysis is set forth in Appendix B.

### **D. Initial Regulatory Flexibility Analysis**

382. As required by the Regulatory Flexibility Act of 1980 (RFA),<sup>777</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the Notice. The analysis is found in Appendix A. We request written public comment on the analysis. Comments must be filed in accordance with the same deadlines as comments filed in response to the *NPRM* & *MO&O*, and must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this *NPRM* & *MO&O*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

### **E. Paperwork Reduction Analysis**

383. This document contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new information collection requirements

<sup>775</sup> See 5 U.S.C. § 601-612. The RFA has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>776</sup> 5 U.S.C. § 605(b).

<sup>777</sup> See 5 U.S.C. § 603.

contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

384. In this present document, we have assessed the effects of requiring licensees to file Initiation Plans and Post Transition Notification Plans, and find that these requirements will not adversely affect businesses with fewer than 25 employees. First, it is unlikely that such businesses will serve as Proponents under our new Transition Plan thereby triggering the requirement to file an Initiation Plan as we generally expect that Proponents will largely consist of larger businesses with sufficient revenue to transition an entire market. To the extent that such businesses would serve as Proponents, the filing of Initiation Plans will not constitute a burden or require significant paperwork preparation because these Proponents will meet this filing requirement, by submitting, in whole or in part, their written agreements on transition. With regard to the Post Transition Notification Plan, we do not believe that such a filing would constitute a burden to businesses with fewer than 25 employees because such notices will consist of a simple notification to the Commission that the transition has been completed. This notification is in the public interest because it will help to ensure that the BRS/EBS spectrum is properly utilized. We seek comment on these conclusions.

#### **F. Further Information**

385. For further information concerning this rulemaking proceeding, contact Genevieve Ross or Nancy Zaczek, Broadband Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, S.W., Room 3-B-153, Washington, D.C. 20554; at (202) 418-2487 or via the Internet to [Nancy.Zaczek@fcc.gov](mailto:Nancy.Zaczek@fcc.gov) or [Genevieve.Ross@fcc.gov](mailto:Genevieve.Ross@fcc.gov).

#### **VII. ORDERING CLAUSES**

386. Accordingly, IT IS ORDERED, pursuant to sections 1, 2, 4(i), 7, 10, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333 and 706 of the Communications Act of 1934, 47 U.S.C. §§ 151, 152, 154(i), 157, 160, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333, and 706, that this *Report and Order* is hereby ADOPTED.

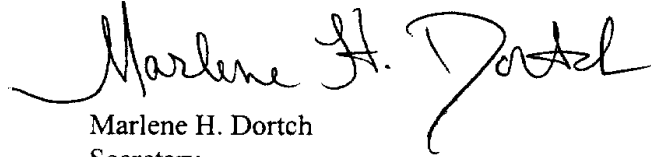
387. IT IS FURTHER ORDERED, pursuant to sections 1, 2, 4(i), 7, 10, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333 and 706 of the Communications Act of 1934, 47 U.S.C. §§ 151, 152, 154(i), 157, 160, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333, and 706, that this *Further Notice of Proposed Rulemaking* is hereby ADOPTED.

388. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulatory changes described in this *Further Notice of Proposed Rulemaking*, and that comment is sought on these proposals.

389. IT IS FURTHER ORDERED, that the proceeding entitled Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217 IS TERMINATED.

390. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order & Further Notice of Proposed Rulemaking*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

A handwritten signature in black ink, reading "Marlene H. Dortch". The signature is fluid and cursive, with the first name "Marlene" being the most prominent.

Marlene H. Dortch  
Secretary

## APPENDIX A

## INITIAL REGULATORY FLEXIBILITY ANALYSIS

(For Further Notice of Proposed Rulemaking)

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>778</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this *Further Notice of Proposed Rule Making (FNPRM)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines specified in the *FNPRM* for comments. The Commission will send a copy of this *FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>779</sup> In addition, the *FNPRM* and IRFA (or summaries thereof) will be published in the Federal Register.<sup>780</sup>

**Need for, and Objectives of, the Proposed Rules:**

2. In this *FNPRM* we seek comments on solutions to implement in the event that the plan we adopt today for transitioning to the new band plan, set forth in section IV.A.5, *supra*, does not reach a satisfactory stage of implementation within three years. A quick and efficient transition to a segmented, de-interleaved band plan is critical to ensuring that the public spectrum resource represented by the 2500-2690 MHz band does not remain underutilized. We have adopted a new band plan to further the public interest in efficient and intensive use of spectrum. To prevent undue delay in implementing the new band plan, the transition process will sunset in each major economic area<sup>781</sup> where a proponent does not timely file within three years of the rules' effective date a transition proposal that has resolved, pursuant to the Commission's rules, any properly presented objections. This three year time limit will provide an incentive for existing users to develop transition proposals in a timely manner.<sup>782</sup> Finally, recognizing that parties may not be able to control the timing of all aspects of the transition, we require only that the proposal be finalized, with any objections addressed, and filed within the three-year period.

3. Irrespective of how well the transition process to the new band plan is designed, it may

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<sup>778</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996, (SBREFA) Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>779</sup> See 5 U.S.C. § 603(a).

<sup>780</sup> See 5 U.S.C. § 603(a).

<sup>781</sup> For detailed discussion on MEAs, see para. 82, *supra*.

<sup>782</sup> Three years is an adequate period for existing users to develop a detailed proposal for transitioning existing uses and facilities to the new band plan and address objections from other users. As an initial matter, many existing users already have had ample time to consider transitions to the new band plan. The new band plan and the transition process incorporate substantial elements of the Coalition's proposal, which has been the subject of extensive public comment for nearly two years. Moreover, many users of this spectrum are members of the Coalition and played a role in crafting the initial proposal.

not be possible for private parties to transition existing uses to the new band plan in a way that balances the public interest in protecting those uses with the public interest in the new band plan. There are large numbers of existing users in the band with varied and disparate interests. A proponent therefore must coordinate large numbers of substantially varying interests in order to transition to the new band plan. A proponent may not come forward in every major economic area and every proponent that comes forward may not be able to resolve all reasonable objections made to its proposal. Furthermore, the transition process may not perfectly define reasonable transition proposals or rapidly and accurately determine whether particular objections to particular transitions are reasonable. Consequently, transitions to the new band plan may not occur within one or more major economic area within the allotted time.

4. Consequently, we tentatively conclude herein that in major economic areas that are not transitioned to the new band plan pursuant to the transition process we have adopted herein,<sup>783</sup> the public interest in services made possible by the new band plan will be best served by clearing existing users from the spectrum. The transition process we have adopted represents the best effort at transitioning existing use to facilities compatible with the new band plan. While new transition plans, including in areas otherwise without one, might result from refinements to the transition process, we conclude that the absence of a timely filed Initiation Plan<sup>784</sup> indicates that existing uses cannot be reasonably balanced with the new band plan in the relevant area. Consequently, the public will receive the benefits of the new band plan only if existing users are cleared from the spectrum and the Commission grants new licenses to use the spectrum consistent with the new band plan. Accordingly, we propose to implement this transition process in areas where the requirements we have instituted herein are not met within the required time frame.

5. As stated in the text of the *FNPRM*,<sup>785</sup> we request comment on a number of issues relating to competitive bidding procedures that could be used to assign new licenses in this band by auction. We propose to conduct any such auction in conformity with the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's rules, and substantially consistent with many of the bidding procedures that have been employed in previous auctions.<sup>786</sup> Specifically, we propose to employ the Part 1 rules governing, among other things, competitive bidding design, designated entities, application and payment procedures, collusion issues, and unjust enrichment.<sup>787</sup> Under this proposal, such rules would be subject to any modifications that the Commission may adopt in our Part 1 proceeding.<sup>788</sup> In addition, consistent with current practice, matters such as the appropriate competitive

<sup>783</sup> See section IV.A.5, *supra*.

<sup>784</sup> See paras. 86-87, *supra*.

<sup>785</sup> See para. 264-319, *supra*.

<sup>786</sup> See, e.g., Amendment of Part 1 of the Commission's Rules - Competitive Bidding Procedures, WT Docket No. 97-82, Order, Memorandum Opinion and Order and Notice of Proposed Rule Making, 12 FCC Rcd 5686 (1997); Third Report and Order and Second Further Notice of Proposed Rule Making, 13 FCC Rcd 374 (1997) (Part 1 Third Report and Order); Order on Reconsideration of the Third Report and Order, Fifth Report and Order, and Fourth Further Notice of Proposed Rule Making, 15 FCC Rcd 15293 (2000) (*recon. pending*) (Part 1 Recon Order/Fifth Report and Order and Fourth Further Notice of Proposed Rule Making); Seventh Report and Order, 16 FCC Rcd 17546 (2001); Eighth Report and Order, 17 FCC Rcd 2962 (2002).

<sup>787</sup> See 47 C.F.R. § 1.2101 *et seq.*

<sup>788</sup> See Fourth Further Notice of Proposed Rule Making, 15 FCC Rcd 15293; see also Part 1 Recon Order/Fifth Report and Order, 15 FCC Rcd 15293 (*recon. pending*) [cite check – recon pending?].



bidding design, as well as minimum opening bids and reserve prices, would be determined by the Wireless Telecommunications Bureau pursuant to its delegated authority.<sup>789</sup> We seek comment on whether any of our Part 1 rules or other auction procedures would be inappropriate or should be modified for an auction of new licenses in this band, and on whether alternative rules would more effectively serve our basic purposes.<sup>790</sup>

6. We seek comment on the appropriate definition(s) of small business that should be used to determine eligibility for bidding credits in the auction. With respect to the auction of EBS licenses, we further seek comment on any special challenges associated with governmental educational institutions or non-governmental non-profit educational institutions participating in auctions.

7. In the *Part 1 Third Report and Order*, we adopted a standard schedule of bidding credits for certain small business definitions, the levels of which were developed based on our auction experience.<sup>791</sup> The standard schedule appears at Section 1.2110(f)(2) of the Commission's rules.<sup>792</sup> Are these levels of bidding credits appropriate for this band? For this proceeding, we would propose to define an entity with average annual gross revenues not exceeding \$40 million for the preceding three years as a "small business;" an entity with average gross revenues not exceeding \$15 million for the same period as a "very small business;" and an entity with average gross revenues not exceeding \$3 million for the same period as an "entrepreneur."<sup>793</sup> In the event that we offer bidding credits on this basis, we propose to provide qualifying "small businesses" with a bidding credit of 15%, qualifying "very small businesses" with a bidding credit of 25%; and qualifying "entrepreneurs" with a bidding credit of 35%, consistent with Section 1.2110(f)(2).<sup>794</sup> Finally, we invite comment on the effect of potentially having three small business sizes, and bidding credits, for new licenses in this band while having had only one small business size (average annual gross revenues for the preceding three years not exceeding \$40 million) and one credit (15%) in the BRS service.<sup>795</sup> We seek comment on this proposal.

8. We recognize that educational institutions and non-profit educational organizations eligible to hold EBS licenses may have unique characteristics. We therefore invite comment on whether

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<sup>789</sup> See Amendment of Part 1 of the Commission's Rules - Competitive Bidding Procedures, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 448-49, 454-55, ¶¶ 125, 139 (directing the Bureau to seek comment on specific mechanisms relating to auction conduct pursuant to the Balanced Budget Act of 1997) (*Part 1 Third Report and Order*).

<sup>790</sup> In 1997, Congress mandated that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." See 47 U.S.C. § 309(j)(4)(D). In addition, section 309(j)(3)(B) of the Act provides that in establishing eligibility criteria and bidding methodologies, the Commission shall promote "economic opportunity and competition . . . by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women." See 47 U.S.C. § 309(j)(3)(B).

<sup>791</sup> See *Part 1 Third Report and Order*, 13 FCC Rcd at 403-04, ¶ 47.

<sup>792</sup> See 47 C.F.R. § 1.2110(f)(2).

<sup>793</sup> See 47 C.F.R. § 1.2110(f)(2). We note that we will coordinate the small business size standards for ITFS in this proceeding with the U.S. Small Business Administration.

<sup>794</sup> 47 C.F.R. § 1.2110(f)(2)(i)-(iii).

<sup>795</sup> See 47 C.F.R. § 21.961(b).

distinctive characteristics of EBS licensees require distinct rules for assessing the relative size of potential participants in an auction. How do our designated entity provisions comport with the unique challenges and status of educational institutions? Should we establish special provisions for non-profit educational institutions that may want to have access to EBS spectrum but do not have the financial capability to compete in an auction for spectrum licenses? We seek comment on whether the non-commercial character of EBS licensees requires any special procedures for determining the average annual gross revenues of such entities. For example, are our standard gross revenue attribution rules an appropriate method of evaluating the relative resources of universities and government entities? We also invite comment on whether some other criterion besides average annual gross revenues should be used for identifying small entities among EBS licensees and similar applicants.

9. Commenters proposing alternative business size standards should give careful consideration to the likely capital requirements for developing services in this spectrum. In this regard, we note that new licensees may be presented with issues and costs involved in transitioning incumbents and developing markets, technologies, and services. Commenters also should consider whether the band plan and characteristics of the band suggest adoption of other small business size definitions and/or bidding credits in this instance.

10. We believe our proposals will encourage utilization of this band and the development of new innovative services to the public such as providing wireless broadband services, including high-speed Internet access and mobile services. We also believe that our proposals will provide licensees flexibility of use which will allow them to adapt quickly to changing market conditions and the marketplace.

#### **Legal Basis:**

11. The proposed action is authorized under Sections 1, 2, 4(i), 7, 10, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333 and 706 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 157, 160, 201, 214, 301, 302, 303, 307, 308, 309, 310, 319, 324, 332, 333, and 706.

#### **Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply:**

12. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules.<sup>796</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms, "small business," "small organization," and "small governmental jurisdiction."<sup>797</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>798</sup> A small business concern is one

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<sup>796</sup> 5 U.S.C. § 603(b)(3).

<sup>797</sup> 5 U.S.C. § 601(6).

<sup>798</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

<sup>798</sup> 15 U.S.C. § 632.

which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>799</sup>

13. Nationwide, there are 4.44 million small business firms, according to SBA reporting data.<sup>800</sup> In this section, we further describe and estimate the number of small entity licensees and regulatees that may be affected by rules adopted pursuant to this *NPRM*. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be the data that the Commission publishes in its *Trends in Telephone Service* report.<sup>801</sup> The SBA has developed small business size standards for wireline and wireless small businesses within the three commercial census categories of Wired Telecommunications Carriers,<sup>802</sup> Paging,<sup>803</sup> and Cellular and Other Wireless Telecommunications.<sup>804</sup> Under these categories, a business is small if it has 1,500 or fewer employees. Below, using the above size standards and others, we discuss the total estimated numbers of small businesses that might be affected by our actions.

14. Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and ITFS. Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as “wireless cable,” transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).<sup>805</sup> In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.<sup>806</sup> The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating \$12.5 million or less in annual receipts.<sup>807</sup> According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.<sup>808</sup> Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more

<sup>799</sup> 15 U.S.C. § 632.

<sup>800</sup> See 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

<sup>801</sup> FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service*, Table 5.3 (May 2002) (*Trends in Telephone Service*).

<sup>802</sup> 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517110.

<sup>803</sup> 13 C.F.R. § 121.201, NAICS code 517211.

<sup>804</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>805</sup> Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, MM Docket No. 94-131 and PP Docket No. 93-253, *Report and Order*, 10 FCC Rcd 9589, 9593 ¶ 7 (1995) (*MDS Auction R&O*).

<sup>806</sup> 47 C.F.R. § 21.961(b)(1).

<sup>807</sup> 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

<sup>808</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization)”, Table 4, NAICS code 513220 (issued October 2000).

but less than \$25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.<sup>809</sup> Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

15. In connection with the 1996 MDS auction, the Commission defined "small business" as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years.<sup>810</sup> The Commission established this small business definition in the context of this particular service and with the approval of SBA.<sup>811</sup> The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).<sup>812</sup> Of the 67 auction winners, 61 met the definition of a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that are considered small entities.<sup>813</sup> After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 MDS licensees that are defined as small businesses under either the SBA or the Commission's rules. Some of those 440 small business licensees may be affected by the proposals in this *NPRM & MO&O*.

16. Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Instructional Television Fixed Service. Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS). In connection with the 1996 MDS auction, the Commission defined "small business" as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years. The SBA has approved of this standard. The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.

17. In addition, the SBA has developed a small business size standard for Cable and Other

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<sup>809</sup> In addition, the term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

<sup>810</sup> 47 C.F.R. § 21.961(b)(1).

<sup>811</sup> See *MDS Auction R&O*, 10 FCC Rcd 9589.

<sup>812</sup> Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See *Id.* at 9608.

<sup>813</sup> 47 U.S.C. § 309(j). (Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "other telecommunications" (annual receipts of \$11 million or less)). See 13 C.F.R. 121.201, NAICS code 513220.

Program Distribution, which includes all such companies generating \$12.5 million or less in annual receipts. According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year. Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the proposed rules and policies.

18. Finally, while SBA approval for a Commission-defined small business size standard applicable to ITFS is pending, educational institutions are included in this analysis as small entities. There are currently 2,032 ITFS licensees, and all but 100 of these licenses are held by educational institutions. Thus, we tentatively conclude that at least 1,932 ITFS licensees are small businesses.

19. Cable and Other Program Distribution. This category includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems, and subscription television services. The SBA has developed small business size standard for this census category, which includes all such companies generating \$12.5 million or less in revenue annually. According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year. Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, the Commission estimates that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed herein.

20. There are presently 2032 ITFS licensees. All but 100 of these licenses are held by educational institutions (these 100 fall in the MDS category, above). Educational institutions may be included in the definition of a small entity.<sup>815</sup> ITFS is a non-profit non-broadcast service that, depending on SBA categorization, has, as small entities, entities generating either \$10.5 million or less, or \$11.0 million or less, in annual receipts.<sup>816</sup> However, we do not collect, nor are we aware of other collections of, annual revenue data for ITFS licensees. Thus, we find that up to [1932] of these educational institutions are small entities, some of which these providers, specifically those who have not met the requirements for transition articulated herein may be affected by our spectrum clearing proposal

#### **Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements:**

21. There are no new reporting, recordkeeping or other compliance requirements proposed in the *FNPRM*.

#### **Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered:**

22. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance

<sup>815</sup> See 5 U.S.C. §§ 601 (3)-(5).

<sup>816</sup> See 13 C.F.R. § 121.210 (SIC 4833, 4841, and 4899).

or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities."<sup>817</sup>

23. In this *FNPRM*, we seek comment on a spectrum clearing proposal<sup>818</sup> to ensure that the 2500-2690 MHz band does not lie fallow. Inasmuch as this proposal provides opportunities for new entrants in the band, it opens up economic opportunities to a variety of spectrum users, including small businesses. In the *R&O* portion of this document, we have adopted an alternative to this spectrum clearing proposal, which consists of transitioning current users to the new band plan also adopted.<sup>819</sup> Our spectrum clearing proposal could be implemented in the event that the plan we adopt is not satisfactorily implemented within three years. Therefore, affected parties have been given an alternative to our spectrum clearing proposal, and will only be subject thereto in the event that they do not comply with our new rules in a reasonable amount of time. We also seek comment on significant alternatives commenters believe we should adopt.

#### **Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule**

24. None.

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<sup>817</sup> See 5 U.S.C. § 603(c).

<sup>818</sup> See section V.A.2, *supra*.

<sup>819</sup> See section IV.A.5, *supra*.

## APPENDIX B

## FINAL REGULATORY FLEXIBILITY ANALYSIS

*(For Report and Order)*

25. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>820</sup> an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the *Notice of Proposed Rule Making (NPRM)* was incorporated therein. The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. No comments were submitted specifically in response to the IRFA; we nonetheless discuss certain general comments below. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>821</sup>

**Need for, and Objectives of, the Proposed Rules:**

26. In this *Report and Order (R&O)* we adopt a number of changes concerning the rules governing the 2500-2690 MHz band, for the Multipoint Distribution Service (MDS), the Multi-channel Multipoint Distribution Service (MMDS), and the Instructional Television Fixed Service (ITFS). The rules we adopt today include: revising technical rules to increase licensee flexibility; revising the band plan to eliminate the current interleaved channel scheme to provide licensees with contiguous spectrum; implementing service rules for mobile operation; retaining eligibility restrictions to preserve the ITFS service; simplifying and streamlining the licensing process; and implementing application filing and processing electronically via our Universal Licensing System with a six-month transition period after application processing in ULS begins before requiring mandatory electronic filing.

27. We believe the rules we adopt today will both encourage the enhancement of existing services using this band and promote the development of new innovative services to the public, such as providing wireless broadband services, including high-speed Internet access and mobile services. We also believe that our new rules will allow licensees to adapt quickly to changing market conditions and the marketplace, rather than to government regulation, in determining how this band can best be used.

**Summary of Significant Issues Raised by Public Comments in Response to the IRFA:**

28. No comments were submitted specifically in response to the IRFA.

**Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply:**

29. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules.<sup>822</sup> The RFA generally defines

<sup>820</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996, (SBREFA) Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>821</sup> See 5 U.S.C. § 604.

<sup>822</sup> 5 U.S.C. § 603(b)(3).

the term "small entity" as having the same meaning as the terms, "small business," "small organization," and "small governmental jurisdiction."<sup>823</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>824</sup> A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>825</sup> A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."<sup>826</sup>

30. In this section, we further describe and estimate the number of small entity licensees and regulatees that may be affected by rules adopted pursuant to this *NPRM*. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be the data that the Commission publishes in its *Trends in Telephone Service* report.<sup>827</sup>

31. Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and ITFS. Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).<sup>828</sup> In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.<sup>829</sup> The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that are considered small entities.<sup>830</sup> After adding the number of small business auction licensees to the number

<sup>823</sup> 5 U.S.C. § 601(6).

<sup>824</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

<sup>824</sup> 15 U.S.C. § 632.

<sup>825</sup> 15 U.S.C. § 632.

<sup>826</sup> 5 U.S.C. § 601(4).

<sup>827</sup> FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service*, Table 5.3 (May 2002) (*Trends in Telephone Service*).

<sup>828</sup> Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, MM Docket No. 94-131 and PP Docket No. 93-253, *Report and Order*, 10 FCC Rcd 9589, 9593 ¶ 7 (1995) (*MDS Auction R&O*).

<sup>829</sup> 47 C.F.R. § 21.961(b)(1).

<sup>830</sup> 47 U.S.C. § 309(j). (Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "other telecommunications" (annual receipts of \$11 million or less)). See 13 C.F.R. 121.201, NAICS code 513220.



of incumbent licensees not already counted, we find that there are currently approximately 440 MDS licensees that are defined as small businesses under either the SBA or the Commission's rules. Some of those 440 small business licensees may be affected by the decisions in this *R&O*.

32. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating \$12.5 million or less in annual receipts.<sup>831</sup> According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.<sup>832</sup> Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard is also applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.<sup>833</sup> Thus, we estimate that at least 1,932 licensees are small businesses.

33. MDS is also heavily encumbered with licensees of stations authorized prior to the auction. The SBA has developed a definition of small entities for pay television services that includes all such companies generating \$11 million or less in annual receipts.<sup>834</sup> This definition includes multipoint distribution systems, and thus applies to MDS licensees and wireless cable operators that did not participate in the MDS auction. Information available to us indicates that there are [832] of these licensees and operators that do not generate revenue in excess of \$11 million annually. Therefore, for purposes of this IRFA, we find there are approximately [892] small MDS providers as defined by the SBA and the Commission's auction rules, and some of these providers may take advantage of our amended rules to provide two-way MDS.

34. There are presently [2032] ITFS licensees. All but [100] of these licenses are held by educational institutions (these [100] fall in the MDS category, above). Educational institutions may be included in the definition of a small entity.<sup>835</sup> ITFS is a non-profit non-broadcast service that, depending on SBA categorization, has, as small entities, entities generating either \$10.5 million or less, or \$11.0 million or less, in annual receipts.<sup>836</sup> However, we do not collect, nor are we aware of other collections of, annual revenue data for ITFS licensees. Thus, we find that up to [1932] of these educational institutions are small entities that may take advantage of our amended rules to provide additional flexibility to ITFS.

#### **Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements:**

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<sup>831</sup> 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

<sup>832</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)", Table 4, NAICS code 513220 (issued October 2000).

<sup>833</sup> In addition, the term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

<sup>834</sup> 13 C.F.R. § 121.201.

<sup>835</sup> See 5 U.S.C. §§ 601 (3)-(5).

<sup>836</sup> See 13 C.F.R. § 121.210 (SIC 4833, 4841, and 4899).

35. Applicants for MDS or ITFS licenses must submit license applications through the Universal Licensing System using FCC Form 601,<sup>837</sup> and other appropriate forms.<sup>838</sup> Licensees will also be required to apply for an individual station license by filing FCC Form 601 for those individual stations that (1) require submission of an Environmental Assessment of the facilities under Section 1.1307 of our Rules;<sup>839</sup> (2) require international coordination of the application;<sup>840</sup> or (3) require coordination with the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC). While these requirements are new with respect to potential licensees in the ITFS and MDS bands, the Commission has applied these requirements to licensees in other bands. Moreover, the Commission is also eliminating many burdensome filing requirements that have previously been applied to MDS and ITFS.<sup>841</sup>

**Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered:**

36. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.”<sup>842</sup>

37. Regarding our decision to retain ITFS eligibility restrictions, we realize that certain entities expressed their wishes that eligibility restrictions be lifted throughout the entire ITFS spectrum. However, this concern is mitigated by the fact that even though only qualifying educational institutions can hold licenses in the band, such institutions are free to lease out excess capacity to non-educational entities. Throughout the years, this has been the dominant practice in the band, and in fact, the band is used by non-educational entities. Our decision is also mitigated by the fact that non-educational entities may also acquire this spectrum by entering into negotiations with BRS licensees, who occupy the same spectrum.

38. Herein we have adopted a variation of the band plan recommended by the Wireless Communications Association (WCA), National Instructional Television Fixed Service (NIA) and Catholic Television Network (CTN) (collectively, the Coalition). Our preferred variation contains upper and lower band segments for low-power operations (UBS and LBS, respectively), and a mid band segment (MBS) for high-power operations. We do not anticipate that this variation will have any adverse effect on small entities. This is because the new band plan provides contiguous blocks of spectrum whereas the old band plan provided interleaved channels that prevented licensees from employing innovative technologies. Although some entities rejected the three segment plan we have adopted and

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<sup>837</sup> 47 C.F.R. § 1.913(a)(1).

<sup>838</sup> 47 C.F.R. § 1.2107.

<sup>839</sup> 47 C.F.R. § 1.1307.

<sup>840</sup> See e.g., 47 C.F.R. § 1.928 (regarding frequency coordination arrangements between the U.S. and Canada).

<sup>841</sup> See section IV.D, *supra*.

<sup>842</sup> See 5 U.S.C. § 603(c).

argued that the Commission should adopt across-the-board power reductions instead of the three band segments which require a shuffling of channel assignments, we believe this alternative would have had a significant negative impact on ITFS and MDS licensees. This is because many of these licensees use this spectrum for high-power operations, and an across-the-board power reduction rule would result in the virtual shut down of such licensees' operations. In contrast, the approach we have adopted will accommodate both high and low-power operations.

39. Regarding our decision to adopt, with some modifications, the Coalition's plan for transitioning licensees to the new band plan, we recognize that some commenters were resistant to the Coalition transition plan criticizing it for having no deadlines and arguing that it would create daisy chains that would actually prevent the transition from being completed.<sup>843</sup> However, we believe this concern is mitigated by our decision to set a three year deadline for initiating the transition process. We have also notified interested parties herein that if they do not comply with the three year deadline, we will implement another transition plan, and have sought comment on other transition plans we can implement if we later find that the one we adopt today is not successful. With regard to the possible daisy chain problem, we have modified the Coalition plan to transition to the new band plan using larger areas than the Coalition recommends.

40. Finally, licensees that must transition to the new band plan will be affected in that some will have to bear the costs of such transition. However, the record reflects that licensees unanimously agree that the band plan must be modified, and the transition costs are outweighed by the value and utility of converting the band plan into one which provides licensees with contiguous spectrum.

41. Regarding our decision to implement geographic area licensing for all licensees in the band, we do not anticipate any adverse effect on small entities. Instead, our approach here should benefit all licensees, including small entities, as it reduces the burdens associated with filing applications for new sites.

42. Regarding our decision to provide licensees with the flexibility to employ the technologies of their choice in the band, we do not anticipate any adverse effect on small entities. To the contrary, this decision will allow licensees to quickly adjust to changes in technology and market demand without seeking Commission approval.

43. Regarding our decision to refrain from allowing high-power unlicensed operations in the 2500-2690 MHz band, we recognize that some small businesses would have liked to deploy unlicensed operations in the band. However, we believe this concern is outweighed by the fact that allowing such operations would cause interference to primary operations in the band, thereby creating uncertainty for licensees and discouraging investment in the band. Furthermore, we note that Part 15 of the Commission's Rules provides other opportunities for unlicensed operations in the electromagnetic spectrum. We note specifically that the Commission has initiated another rulemaking that specifically deals with unlicensed operations that may ultimately provide more opportunities for unlicensed use.

44. The regulatory burdens contained in the *R&O*, such as filing applications on appropriate forms and filing transition plans with the Commission, are necessary in order to ensure that the public receives the benefits of innovative new services, or enhanced existing services, in a prompt and efficient manner. Nonetheless, we have reduced burdens wherever possible by eliminating a number of

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<sup>843</sup> See discussion at para. 70, *supra*.

unnecessary regulations concerning filing requirements.<sup>844</sup>

**Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule**

45. None.

**Report to Congress:**

The Commission will send a copy of this *R&O*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.<sup>845</sup> In addition, the Commission will send a copy of this *R&O*, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of this *R&O* and FRFA (or summaries thereof) will also be published in the *Federal Register*.<sup>846</sup>

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<sup>844</sup> See section IV.D, *supra*.

<sup>845</sup> See generally, 5 U.S.C. § 801 (a)(1)(A).

<sup>846</sup> See 5 U.S.C. § 604(b).

**APPENDIX C**  
**FINAL RULES**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Parts 1, 2, 11, 15, 21, 27, 73, 74, 76, 78, 79, and 101 as follows:

**PART 1 – PRACTICE AND PROCEDURE**

1. The authority citation for Part 1 continues to read:

**AUTHORITY:** 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309 and 325(e).

2. Section 1.65 is amended by revising paragraph (b) to read as follows:

**§ 1.65 Substantial and significant changes in information furnished by applicants to the Commission.**

\* \* \* \* \*

- b) Applications in broadcast services subject to competitive bidding will be subject to the provisions of §§ 1.2105(b), 73.5002 and 73.3522 regarding the modification of their applications.

\* \* \* \* \*

3. Section 1.815 is amended by deleting and reserving paragraph (c)(1).

4. Section 1.933 is amended by adding paragraphs (c)(8) and (c)(9) to read as follows:

**§ 1.933 Public notices.**

\* \* \* \* \*

(c) \* \* \*

- (8) Broadband Radio Service; and  
(9) Educational Broadband Service.

\* \* \* \* \*

5. Section 1.1102 is amended by revising paragraph (20) to read as follows:

**§ 1.1102 Schedule of charges for applications and other filings in the wireless telecommunication services.**

\* \* \* \* \*

## 20. Broadband Radio Service

Action	FCC Form No.	Fee amount	Payment type code	Address
a. New Station	601 & 159	220.00	CJM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.
b. Major Modification of License	601 & 159	220.00	CJM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358994, Pittsburgh, PA 15251-5155.
c. Certification of Commission, Completion of Construction	601 & 159	80.00	CJM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.
d. License Renewal	601 & 159	220.00	CJM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.
e. Assignment or Transfer:				
(i) First Station on Application	603 & 159	80.00	CCM	Federal Communications Commission Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.
(ii) Each Additional Station	603 & 159	50.00	CAM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.
f. Extension of Construction Authorization	601 & 159	185.00	CHM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.
g. Special Temporary Authority or Request for Waiver of Prior Construction Authorization	Corres & 159	100.00	CEM	Federal Communications Commission, Wireless Bureau Applications, P.O. Box 358155, Pittsburgh, PA 15251-5155.

6. Section 1.1152 is amended by revising numbered item (8) to read as follows:

**§ 1.1152 Schedule of annual regulatory fees and filing locations for wireless radio services.**

\* \* \* \* \*

8. Broadband Radio Service (BRS)..... \$265 FCC, BRS, P.O. Box  
 358835, Pittsburgh, PA,  
 15251-5835.

\* \* \* \* \*

7. Section 1.1307 is amended by revising Table 1 as follows:

**§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.**

\* \* \* \* \*

Table 1.--Transmitters, Facilities and Operations Subject to Routine

## Environmental Evaluation

-----  
 Service (title 47 CFR rule part)                      Evaluation required if  
 -----

## Broadband Radio Service and Educational Broadband Service

(subpart M of part 27) ..... Non-building-mounted antennas: height above  
 ground level to lowest point of antenna <  
 10 m and power > 1640 W EIRP.

Building-mounted antennas: power > 1640 W  
 EIRP.

BRS and EBS licensees are required to attach a  
 label to subscriber transceiver or  
 transverter antennas that:

(1) provides adequate notice regarding  
 potential radiofrequency safety hazards,  
 e.g., information regarding the safe  
 minimum separation distance required  
 between users and transceiver antennas;

and

(2) references the applicable FCC-adopted  
 limits for radiofrequency exposure

specified in § 1.1310.

Wireless Communications Service

- (Part 27) ..... (1) For the 1390-1392 MHz, 1392-1395 MHz, 1432-1435 MHz 1670-1675 MHz and 2385-2390 MHz bands:

Non-building-mounted antennas: height above ground level to lowest point of antenna <10m and total power of all channels > 2000 W ERP (3280 W EIRP).

Building-mounted antennas: total power of all channels >2000 W ERP (3280 W EIRP).

- (2) For the 746-764 MHz, 776-794 MHz, 2305-2320 MHz, and 2345-2360 MHz bands.

Total power of all channels >1000 W ERP (1640 W EIRP).

\* \* \* \* \*

8. Section 1.7001 is amended by revising paragraph (b) to read as follows:

**§ 1.7001 Scope and content of filed reports.**

\* \* \* \* \*

(b) All commercial and government-controlled entities, including but not limited to common carriers and their affiliates (as defined in 47 U.S.C. 153(1)), cable television companies, Broadband Radio Service (BRS) "wireless cable" carriers, other fixed wireless providers, terrestrial and satellite mobile wireless providers, utilities and others, which are facilities-based providers and are providing at least 250 full or one-way broadband lines or wireless channels in a given state, or provide full or one-way broadband service to at least 250 end-user consumers in a given state, shall file with the Commission a completed FCC Form 477, in accordance with the Commission's rules and the instructions to the FCC Form 477, for each state in which they exceed this threshold.

\* \* \* \* \*

9. Section 1.9005 is amended by redesignating paragraphs (h) through (bb) as paragraphs (j) through (dd) and adding new paragraphs (h) and (i) to read as follows:

**§ 1.9005 Included services.**

\* \* \* \* \*

- (h) The Broadband Radio Service (part 27 of this chapter);  
(i) The Educational Broadband Service (part 27 of this chapter);

\* \* \* \* \*

10. Section 1.9020 is amended by revising paragraph (d)(2)(i) to read as follows:



**§ 1.9020 Spectrum manager leasing arrangements.**

\* \* \* \* \*

(d) \* \* \*

(2)(i) The spectrum lessee must meet the same eligibility and qualification requirements that are applicable to the licensee under its license qualification, except that spectrum lessees entering into spectrum leasing arrangements involving licensees in the Educational Broadband Service (*see* § 27.1201) are not required to comply with the eligibility requirements pertaining to such licensees (*see* § 27.1201) so long as the spectrum lessees meet the other eligibility and qualification requirements applicable to Part 27 services (*see* § 27.12).

\* \* \* \* \*

11. Section 1.9030 is amended by revising paragraph (d)(2)(i) to read as follows:

**§ 1.9030 Long-term de facto transfer leasing arrangements.**

\* \* \* \* \*

(d) \* \* \*

(2)(i) The spectrum lessee must meet the same eligibility and qualification requirements that are applicable to the licensee under its license qualification, except that spectrum lessees entering into spectrum leasing arrangements involving licensees in the Educational Broadband Service (*see* § 27.1201) are not required to comply with the eligibility requirements pertaining to such licensees (*see* § 27.1201) so long as the spectrum lessees meet the other eligibility and qualification requirements applicable to Part 27 services (*see* § 27.12).

\* \* \* \* \*

12. A new Section 1.9047 is added to read as follows:

**§ 1.9047 Special provisions relating to spectrum leasing arrangements involving Educational Broadband Service spectrum**

Licensees in the Educational Broadcasting Service may enter into spectrum leasing arrangements with spectrum lessees only insofar as such arrangements comply with the applicable requirements for spectrum leasing arrangements involving spectrum in that service as set forth in Section 27.1214 of this chapter.

**PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS**

13. The authority citation for part 2 continues to read as follows:

**AUTHORITY:** 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

14. Section 2.106, the Table of Frequency Allocations, is amended by revising pages 51, 52, 53, and footnote NG147 to read as follows.

**§ 2.106 Table of Frequency Allocations.**

\* \* \* \* \*

International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
See previous page for 2300-2450 MHz			2345-2360 Fixed Mobile US339 Radiolocation G2 G120  US327	2345-2360 FIXED MOBILE US339 RADIOLOCATION BROADCASTING- SATELLITE 5.396 US327	Wireless Communications (27) Aviation (87)
			2360-2385 MOBILE US276 RADIOLOCATION G2 G120 Fixed	2360-2385 MOBILE US276	Aviation (87)
			2385-2390   US363	2385-2390 FIXED MOBILE NG174  US363	Wireless Communications (27)
			2390-2400  G122	2390-2400 AMATEUR	Amateur (97)
			2400-2402  5.150 G123	2400-2417 AMATEUR	ISM Equipment (18) Amateur (97)
			2402-2417		
			5.150 G122	5.150 5.282	
			2417-2450 Radiolocation G2	2417-2450 Amateur	
			5.150 G124	5.150 5.282	
			2450-2483.5	2450-2483.5 FIXED MOBILE Radiolocation	ISM Equipment (18) Auxiliary Broadcasting (74) Private Land Mobile (90) Fixed Microwave (101)
2450-2483.5 FIXED MOBILE Radiolocation  5.150 5.397	2450-2483.5 FIXED MOBILE RADIOLOCATION  5.150 5.394		5.150 US41	5.150 US41	

2483.5-2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A Radiolocation	2483.5-2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIOLOCATION RADIODETERMINATION- SATELLITE (space-to- Earth) 5.398	2483.5-2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIOLOCATION Radiodetermination-satellite (space-to-Earth) 5.398	2483.5-2500 MOBILE-SATELLITE (space-to-Earth) US319 US380 US391 RADIODETERMINATION- SATELLITE (space-to- Earth) 5.398	2483.5-2495 MOBILE-SATELLITE (space-to-Earth) US319 US380 RADIODETERMINATION- SATELLITE (space-to- Earth) 5.398 5.150 5.402 US41 NG147	ISM Equipment (18) Satellite Communications (25)
				2495-2500 FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) US319 US380 RADIODETERMINATION- SATELLITE (space-to- Earth) 5.398 5.150 5.402 US41 US391 NG147	
5.150 5.371 5.397 5.398 5.399 5.400 5.402	5.150 5.402	5.150 5.400 5.402	5.150 5.402 US41		
2500-2520 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space- to-Earth) 5.403 5.351A 5.405 5.407 5.412 5.414	2500-2520 FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space-to-Earth) 5.403 5.351A 5.404 5.407 5.414 5.415A		2500-2655	2500-2655 FIXED US205 MOBILE except aeronautical mobile	Wireless Communications (27)
2520-2655 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING- SATELLITE 5.413 5.416	2520-2655 FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING- SATELLITE 5.413 5.416	2520-2535 FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING- SATELLITE 5.413 5.416 5.403 5.415A			

5.339 5.403 5.405 5.412 5.418 5.418B 5.418C	5.339 5.403 5.418B 5.418C	2535-2655 FIXED 5.409 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING- SATELLITE 5.413 5.416 5.339 5.418 5.418A 5.418B 5.418C	5.339 US205	5.339	
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2655-3700 MHz (UHF/SHF)					Page 53
International Table			United States Table		FCC Rule Part(s)
Region 1	Region 2	Region 3	Federal Government	Non-Federal Government	
2655-2670 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2670 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING- SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2670 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING- SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2690 Earth exploration-satellite (passive) Radio astronomy US269 Space research (passive)	2655-2690 FIXED US205 MOBILE except aeronautical mobile Earth exploration-satellite (passive) Radio astronomy Space research (passive)	Wireless Communications (27)
5.149 5.412 5.420	5.149 5.420	5.149 5.420			
2670-2690 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2670-2690 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2670-2690 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (passive) Radio astronomy Space research (passive)			
5.149 5.419 5.420	5.149 5.419 5.420	5.149 5.419 5.420 5.420A	US205	US269	
2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)			2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive)		
5.340 5.421 5.422			US246		

2700-2900 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	2700-2900 AERONAUTICAL RADIO- NAVIGATION 5.337 METEOROLOGICAL AIDS Radiolocation G2	2700-2900	
5.423 5.424	5.423 US18 G15	5.423 US18	

\* \* \* \* \*

NG147 Stations in the broadcast auxiliary service and private radio services licensed as of July 25, 1985, or on a subsequent date following as a result of submitting an application for license on or before July 25, 1985, may continue to operate on a primary basis with the mobile-satellite service and the radiodetermination satellite service.

\* \* \* \* \*

**PART 11--EMERGENCY ALERT SYSTEM (EAS)**

15. The authority citation for Part 11 continues to read as follows:

**AUTHORITY:** 47 U.S.C. 151, 154(i) and (o), 303(r), 544(g), and 606, unless otherwise noted.

16. Section 11.11 is amended by revising paragraphs (a) and (c) to read as follows:

**§ 11.11 The Emergency Alert System (EAS).**

a) The EAS is composed of broadcast networks; cable networks and program suppliers; AM, FM Low-power FM (LPFM) and TV broadcast stations; Class A television (CA) stations; Low-power TV (LPTV) stations; cable systems; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels. It requires that at a minimum all participants use a common EAS protocol, as defined in § 11.31, to send and receive emergency alerts in accordance with the effective dates in the following tables:

**Wireless Cable Systems (BRS/EBS Stations)**

[A. Wireless cable systems serving fewer than 5,000 subscribers from a single transmission site must either provide the National level EAS message on all programmed channels--including the required testing--by October 1, 2002, or comply with the following EAS requirements. All other wireless cable systems must comply with B.]

**Wireless Cable Systems (BRS/EBS Stations)**

\* \* \* \* \*

(c) For purposes of the EAS, Broadband Radio Service (BRS) and Educational Broadband Service (EBS) stations operated as part of wireless cable systems in accordance with subpart M of part 27 of this chapter are defined as follows:

(1) A "wireless cable system" is a collection of channels in the BRS or EBS used to provide video programming services to subscribers. The channels may be licensed to or leased by the wireless cable system operator.

\* \* \* \* \*

17. Section 11.31 is amended by revising subparagraph (LLLLLLLL) of paragraph (c) to read as follows:

**§ 11.31 EAS protocol.**

\* \* \* \* \*

(c) \* \* \*

LLLLLLLL--This is the identification of the broadcast station, cable system, BRS/EBS station, NWS office, etc., transmitting or retransmitting the message. These codes will be automatically affixed to all



outgoing messages by the EAS encoder.

\* \* \* \* \*

18. Section 11.35 is amended by revising paragraph (a) to read as follows:

**§ 11.35 Equipment operational readiness.**

(a) Broadcast stations and cable systems and wireless cable systems are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS are installed so that the monitoring and transmitting functions are available during the times the stations and systems are in operation. Additionally, broadcast stations and cable systems and wireless cable systems must determine the cause of any failure to receive the required tests or activations specified in §§ 11.61(a)(1) and (2). Appropriate entries must be made in the broadcast station log as specified in § 73.1820 and § 73.1840 of this chapter, cable system record as specified in §§ 76.1700, 76.1708, and 76.1711 of this chapter, BRS station records, indicating reasons why any tests were not received.

\* \* \* \* \*

**PART 15 – RADIO FREQUENCY DEVICES**

19. The authority citation for Part 15 continues to read as follows:

**AUTHORITY: 47 U.S.C. 154, 302(a), 303, 304, 336, and 544(a), unless otherwise noted.**

20. Section 15.205(a) is amended by deleting “2655-2900 MHz” and replacing that listing with “2690-2900 MHz.”

\* \* \* \* \*

**PART 21 – DOMESTIC PUBLIC FIXED RADIO SERVICES**

21. Under the authority 47 U.S.C. § 154, amend 47 C.F.R. Chapter I by removing Part 21.

**PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES**

22. The authority citation for Part 27 continues to read as follows:

**AUTHORITY: 47 U.S.C. 154 and 303, unless otherwise noted.**

23. Section 27.1 is amended by adding the following subparagraph to paragraph (b):

**§ 27.1 Basis and purpose.**

\* \* \* \* \*

(9) 2495-2690 MHz.

\* \* \* \* \*

24. Section 27.3 is amended by deleting paragraph (h) and by redesignating paragraphs (i) through (q) as (h) through (p), respectively.

25. Section 27.4 is amended by adding the following definitions to read as follows:

26.

**§ 27.4 Terms and definitions.**

\* \* \* \* \*

*Attended operation.* Operation of a station by a designated person on duty at the place where the transmitting apparatus is located with the transmitter in the person's plain view.

\* \* \* \* \*

*Booster service area.* A geographic area to be designated by an applicant for a booster station, within which the booster station shall be entitled to protection against interference as set forth in this part. The booster service area must be specified by the applicant so as not to overlap the booster service area of any other booster authorized to or proposed by the applicant. However, a booster station may provide service to receive sites outside of its booster service area, at the licensee's risk of interference. The booster station must be capable of providing substantial service within the designated booster service area.

*Broadband Radio Service (BRS).* A radio service using certain frequencies in the 2150-2162 and 2496-2690 MHz bands which can be used to provide fixed and mobile services, except for aeronautical services.

\* \* \* \* \*

*Documented complaint.* A complaint that a party is suffering from non-consensual interference. A documented complaint must contain a certification that the complainant has contacted the operator of the allegedly offending facility and tried to resolve the situation prior to filing. The complaint must then specify the nature of the interference, whether the interference is constant or intermittent, when the interference began and the site(s) most likely to be causing the interference. The complaint should be accompanied by a videotape or other evidence showing the effects of the interference. The complaint must contain a motion for a temporary order to have the interfering station cease transmitting. The complaint must be filed with the Secretary's office and served on the allegedly offending party.

*Educational Broadband Service (EBS).* A fixed or mobile service, the licensees of which are educational institutions or non-profit educational organizations, and intended primarily for video, data, or voice transmissions of instructional, cultural, and other types of educational material to one or more receiving locations.

\* \* \* \* \*

*Lower Band Segment (LBS).* Segment of the BRS/EBS band consisting of channels in the frequencies 2496-2572 MHz.

*Middle Band Segment (MBS).* Segment of the BRS/EBS band consisting of channels in the frequencies 2572-2614 MHz.

\* \* \* \* \*

*Point-to-point Broadband station.* A Broadband station that transmits a highly directional signal from a fixed transmitter location to a fixed receive location.

\* \* \* \* \*

*Remote control.* Operation of a station by a designated person at a control position from which the transmitter is not visible but where suitable control and telemetering circuits are provided which allow the performance of the essential functions that could be performed at the transmitter.

\* \* \* \* \*

*Sectorization.* The use of an antenna system at an broadband station, booster station and/or response station hub that is capable of simultaneously transmitting multiple signals over the same frequencies to different portions of the service area and/or simultaneously receiving multiple signals over the same frequencies from different portions of the service area.

\* \* \* \* \*

*Studio to transmitter link (STL).* A directional path used to transmit a signal from a station's studio to its transmitter.

*Temporary fixed broadband station.* A broadband station used for the transmission of material from temporary unspecified points to a broadband station.

\* \* \* \* \*

*Unattended operation.* Operation of a station by automatic means whereby the transmitter is turned on and off and performs its functions without attention by a designated person.

\* \* \* \* \*

*Upper Band Segment (UBS).* Segment of the BRS/EBS band consisting of channels in the frequencies 2614-2690 MHz.

\* \* \* \* \*

27. Section 27.5 is amended by adding a new paragraph (i) to read as follows:

**§ 27.5 Frequencies.**

\* \* \* \* \*

(i) Frequency assignments for the BRS/EBS band.

(1) Pre-transition frequency assignments.

BRS Channel 1: 2150-2156 MHz  
BRS Channel 2: 2156-2162 MHz  
BRS Channel 2A: 2156-2160 MHz  
EBS Channel A1: 2500-2506 MHz  
EBS Channel B1: 2506-2512 MHz  
EBS Channel A2: 2512-2518 MHz  
EBS Channel B2: 2518-2524 MHz  
EBS Channel A3: 2524-2530 MHz  
EBS Channel B3: 2530-2536 MHz  
EBS Channel A4: 2536-2542 MHz  
EBS Channel B4: 2542-2548 MHz  
EBS Channel C1: 2548-2554 MHz  
EBS Channel D1: 2554-2560 MHz  
EBS Channel C2: 2560-2566 MHz  
EBS Channel D2: 2566-2572 MHz  
EBS Channel C3: 2572-2578 MHz  
EBS Channel D3: 2578-2584 MHz  
EBS Channel C4: 2584-2590 MHz  
EBS Channel D4: 2590-2596 MHz  
BRS Channel E1: 2596-2602 MHz  
BRS Channel F1: 2602-2608 MHz  
BRS Channel E2: 2608-2614 MHz  
BRS Channel F2: 2614-2620 MHz  
BRS Channel E3: 2620-2626 MHz  
BRS Channel F3: 2626-2632 MHz  
BRS Channel E4: 2632-2638 MHz  
BRS Channel F4: 2638-2644 MHz  
EBS Channel G1: 2644-2650 MHz  
BRS Channel H1: 2650-2656 MHz  
EBS Channel G1: 2656-2662 MHz  
BRS Channel H1: 2662-2668 MHz  
EBS Channel G1: 2668-2674 MHz  
BRS Channel H1: 2674-2680 MHz  
EBS Channel G1: 2680-2686 MHz  
I Channels: 2686-2690 MHz

(2) *Post transition frequency assignments.* The frequencies available in the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) are listed in this section in accordance with the frequency allocations table of §2.106 of this chapter.

i) Lower Band Segment (LBS): The following channels shall constitute the Lower Band Segment:

BRS Channel 1: 2496-2502 MHz  
EBS Channel A1: 2502-2507.5 MHz

EBS Channel A2: 2507.5-2513 MHz  
EBS Channel A3: 2513-2518.5 MHz  
EBS Channel B1: 2518.5-2524 MHz  
EBS Channel B2: 2524-2529.5 MHz  
EBS Channel B3: 2529.5-2535 MHz  
EBS Channel C1: 2535-2540.5 MHz  
EBS Channel C2: 2540.5-2546 MHz  
EBS Channel C3: 2546-2551.5 MHz  
EBS Channel D1: 2551.5-2557 MHz  
EBS Channel D2: 2557-2562.5 MHz  
EBS Channel D3: 2562.5-2568 MHz  
EBS Channel JA1: 2568.00000-2568.33333 MHz  
EBS Channel JA2: 2568.33333-2568.66666 MHz  
EBS Channel JA3: 2568.66666-2569.00000 MHz  
EBS Channel JB1: 2569.00000-2569.33333 MHz  
EBS Channel JB2: 2569.33333-2569.66666 MHz  
EBS Channel JB3: 2569.66666-2570.00000 MHz  
EBS Channel JC1: 2570.00000-2570.33333 MHz  
EBS Channel JC2: 2570.33333-2570.66666MHz  
EBS Channel JC3: 2570.66666-2571.00000 MHz  
EBS Channel JD1: 2571.00000-2571.33333 MHz  
EBS Channel JD2: 2571.33333-2571.66666 MHz  
EBS Channel JD3: 2571.66666-2572.00000 MHz

ii) Middle Band Segment (MBS): The following channels shall constitute the Middle Band Segment:

EBS Channel A4: 2572-2578 MHz  
EBS Channel B4: 2578-2584 MHz  
EBS Channel C4: 2584-2590 MHz  
EBS Channel D4: 2590-2596 MHz  
EBS Channel G4: 2596-2602 MHz  
BRS Channel F4: 2602-2608 MHz  
BRS Channel E4: 2608-2614 MHz

iii) Upper Band Segment (UBS): The following channels shall constitute the Upper Band Segment:

BRS Channel KH1: 2614.00000-2614.33333 MHz  
BRS Channel KH2: 2614.33333-2614.66666 MHz  
BRS Channel KH3: 2614.66666-2615.00000 MHz  
EBS Channel KG1: 2615.00000-2615.33333 MHz  
EBS Channel KG2: 2615.33333-2616.66666 MHz  
EBS Channel KG3: 2615.66666-2616.00000 MHz  
BRS Channel KF1: 2616.00000-2616.33333 MHz  
BRS Channel KF2: 2616.33333-2616.66666MHz  
BRS Channel KF3: 2616.66666-2617.00000 MHz  
BRS Channel KE1: 2617.00000-2617.33333 MHz  
BRS Channel KE2: 2617.33333-2617.66666 MHz  
BRS Channel KE3: 2617.66666-2618.00000 MHz  
BRS Channel 2: 2618-2624 MHz  
BRS Channel E1: 2624-2629.5 MHz  
BRS Channel E2: 2629.5-2635 MHz

BRS Channel E3: 2635-2640.5 MHz  
EBS Channel F1: 2640.5-2646 MHz  
EBS Channel F2: 2646-2651.5 MHz  
EBS Channel F3: 2651.5-2657 MHz  
BRS Channel H1: 2657-2662.5 MHz  
BRS Channel H2: 2662.5-2668 MHz  
BRS Channel H3: 2668-2673.5 MHz  
BRS Channel G1: 2673.5-2679 MHz  
BRS Channel G2: 2679-2684.5 MHz  
BRS Channel G3: 2684.5-2690 MHz

Note to paragraph (i)(2): No 125 kHz channels are provided for channels in operation in this service. The 125 kHz channels previously associated with these channels have been reallocated to Channel H3 in the upper band segment.

(3) Frequencies will be assigned as follows:

(i) An EBS licensee is limited to the assignment of no more than one 6 MHz channel in the MBS and three channels in the LBS or UBS for use in a single area of operation. Applicants shall not apply for more channels than they intend to construct within a reasonable time, simply for the purpose of reserving additional channels. The number of channels authorized to an applicant will be based on the demonstration of need for the number of channels requested. The Commission will take into consideration such factors as the amount of use of any currently assigned channels and the amount of proposed use of each channel requested, the amount of, and justification for, any repetition in the schedules, and the overall demand and availability of broadband channels in the community. For those applicant organizations formed for the purpose of serving accredited institutional or governmental organizations, evaluation of the need will only consider service to those specified receive sites which submitted supporting documentation.

(ii) An applicant leasing excess capacity and proposing a schedule which complies in all respects with the requirements of Section 1.9047 will have presumptively demonstrated need for no more than four channels. This presumption is rebuttable by demonstrating that the application does not propose to comport with our educational usage requirements as defined in Section 27.1203, and to transmit the requisite minimum educational usage of Section 1.9047 for genuinely educational purposes.

(4) A temporary fixed broadband station may use any available broadband channel on a secondary basis, except that operation of temporary fixed broadband stations is not allowed within 56.3 km (35 miles) of Canada.

(5)

(i) A point-to-point EBS station on the E and F-channel frequencies, may be involuntarily displaced by a BRS applicant or licensee, provided that suitable alternative spectrum is available and that the BRS entity bears the expenses of the migration. Suitability of spectrum will be determined on a case-by-base basis; at a minimum, the alternative spectrum must be licensable by broadband operators on a primary basis (although it need not be specifically allocated to the broadband service), and must provide a signal that is equivalent to the prior signal in picture quality and reliability, unless the broadband licensee will accept an inferior signal. Potential expansion of the BRS licensee may be considered in determining whether alternative available spectrum is suitable.

(ii) If suitable alternative spectrum is located pursuant to paragraph (h)6(i) of this section, the initiating party must prepare and file the appropriate application for the new spectrum, and must simultaneously serve a copy of the application on the EBS licensee to be moved. The initiating party will

be responsible for all costs connected with the migration, including purchasing, testing and installing new equipment, labor costs, reconfiguration of existing equipment, administrative costs, legal and engineering expenses necessary to prepare and file the migration application, and other reasonable documented costs. The initiating party must secure a bond or establish an escrow account to cover reasonable incremental increase in ongoing expenses that may fall upon the migrated licensee. The bond or escrow account should also account for the possibility that the initiating party subsequently becomes bankrupt. If it becomes necessary for the Commission to assess the sufficiency of a bond or escrow amount, it will take into account such factors as projected incremental increase in electricity or maintenance expenses, or relocation expenses, as relevant in each case.

(iii) The EBS licensee to be moved will have a 60-day period in which to oppose the involuntary migration. The broadband party should state its opposition to the migration with specificity, including engineering and other challenges, and a comparison of the present site and the proposed new site. If involuntary migration is granted, the new facilities must be operational before the initiating party will be permitted to begin its new or modified operations. The migration must not disrupt the broadband licensee's provision of service, and the broadband licensee has the right to inspect the construction or installation work.

28. Section 27.12 is revised to read as follows:

**§ 27.12 Eligibility.**

Except as provided in §§ 27.604, 27.1201, and 27.1202, any entity other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, is eligible to hold a license under this part.

29. Section 27.50 is amended by redesignating paragraph (h) as (i) and adding a new paragraph (h) to read as follows:

**§ 27.50 Power limits.**

\* \* \* \* \*

(h) The following power limits shall apply in the BRS and EBS:

(1) *LBS and UBS.* Base stations are limited to 2000 watts peak EIRP. Mobile stations are limited to 2.0 watts EIRP. Response stations are limited to 2.0 watts transmitter output power.

(2) *MBS.* (i) The maximum EIRP of a main or booster station in the MBS shall not exceed 33 dBW + 10log(X/6) dBW, where X is the actual bandwidth if other than 6 MHz, except as provided in subparagraph (ii) of this section.

(ii) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP over a 6 MHz channel in dBW in a given direction shall be determined by the following formula:

$$\text{EIRP} = 33 \text{ dBW} + 10 \log(X/6) \text{ dBW} + 10 \log(360/\text{beamwidth}) \text{ dBW},$$
 where X is the channel width in MHz and  $10 \log(360/\text{beamwidth}) \leq 6 \text{ dB}$ . Beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points.

(3) For television transmission, the peak power of the accompanying aural signal must not exceed 10 percent of the peak visual power of the transmitter. The Commission may order a reduction in aural signal power to diminish the potential for harmful interference.

(4) For main, booster and response stations utilizing digital emissions with non-uniform power spectral density (e.g. unfiltered QPSK), the power measured within any 100 kHz resolution bandwidth within the 6 MHz channel occupied by the non-uniform emission cannot exceed the power permitted within any 100 kHz resolution bandwidth within the 6 MHz channel if it were occupied by an emission with uniform power spectral density, i.e., if the maximum permissible power of a station utilizing a perfectly uniform power spectral density across a 6 MHz channel were 2000 watts EIRP, this would result in a maximum permissible power flux density for the station of  $2000/60 = 33.3$  watts EIRP per 100 kHz bandwidth. If a non-uniform emission were substituted at the station, station power would still be limited to a maximum of 33.3 watts EIRP within any 100 kHz segment of the 6 MHz channel, irrespective of the fact that this would result in a total 6 MHz channel power of less than 2000 watts EIRP.

\* \* \* \* \*

30. Section 27.53 is amended by redesignating paragraph (l) as paragraph (m) by adding a new paragraph (l) to read as follows:

**§ 27.53 Emission limits.**

\* \* \* \* \*

(l) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts.

(1) For analog operations in the MBS with an EIRP in excess of -9 dBW, the signal shall be attenuated at the channel edges by at least 38 dB relative to the peak visual carrier, then linearly sloping from that level to at least 60 dB of attenuation at 1 MHz below the lower band edge and 0.5 MHz above the upper band edge, and attenuated at least 60 dB at all other frequencies.

(2) For fixed and temporary fixed digital stations, the attenuation shall be not less than  $43 + 10 \log (P)$  dB, unless a documented interference complaint is received from an adjacent channel licensee. Provided that the complaint cannot be mutually resolved between the parties, both licensees of existing and new systems shall reduce their out-of-band emissions by at least  $67 + 10 \log (P)$  dB measured at 3 MHz from their channel's edges for distances between stations exceeding 1.5 km. For stations separated by less than 1.5 km, the new licensee shall reduce attenuation at least  $67 + 10 \log (P) - 20 \log(D_{km}/1.5)$ , or when colocated, limit the undesired signal level at the affected licensee's base station receiver(s) at the collocation site to no more than -107 dBm. Mobile Service Satellite licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

(3) For mobile digital stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 MHz from the channel edges. Mobile Service Satellite licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

(4) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower



resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

(5) Alternative out of band emission limit. Licensees in this service may establish an alternative out of band emission limit to be used at specified band edge(s) in specified geographical areas, in lieu of that set forth in this section, pursuant to a private contractual arrangement of all affected licensees and applicants. In this event, each party to such contract shall maintain a copy of the contract in their station files and disclose it to prospective assignees or transferees and, upon request, to the FCC.

\* \* \* \* \*

31. Section 27.55 is amended by revising paragraph (a) to include a new subparagraph (4) to read as follows:

**Sec. 27.55 Signal Strength Limits.**

(a)\* \* \*

(4) BRS and UBS: The predicted or measured median field strength at any location on the geographical border of a licensee's service area shall not exceed the value specified unless the adjacent affected service area licensee(s) agree(s) to a different field strength. This value applies to both the initially offered services areas and to partitioned services areas. Licensees may exceed this signal level where there is no affected licensee that is constructed and providing service. Once the affected licensee is providing service, the original licensee will be required to take whatever steps necessary to comply with the applicable power level at its GSA boundary, absent consent from the affected licensee.

(i) LBS and UBS band: 47 dB [mμ] V/m. This field strength is to be measured at 1.5 meters above the ground over the channel bandwidth (i.e., each 5.5 MHz channel for licensees that hold a full channel block, and for the 5.5 MHz channel for licensees that hold individual channels).

(ii) MBS band: -73.0 dBW/m<sup>2</sup>.

\* \* \* \* \*

32. Section 27.58 is amended by revising the title of the rule and by revising paragraphs (a), (d) and (e) to read as follows:

**§ 27.58 Interference to BRS/EBS Receivers.**

(a) WCS licensees shall bear full financial obligation to remedy interference to BRS/EBS block downconverters if all of the following conditions are met:

- (1) The complaint is received by the WCS licensee prior to February 20, 2002;
- (2) The BRS/EBS downconverter was installed prior to August 20, 1998;

(3) The WCS fixed or land station transmits at 50 or more watts peak EIRP;

(4) The BRS/EBS downconverter is located within a WCS transmitter's free space power flux density contour of -34 dBW/m super2; and

(5) The BRS/EBS customer or licensee has informed the WCS licensee of the interference within one year from the initial operation of the WCS transmitter or within one year from any subsequent power increases at the WCS station.

\* \* \* \* \*

(d) If the WCS licensee cannot otherwise eliminate interference caused to BRS/EBS reception, then that licensee must cease operations from the offending WCS facility.

(e) At least 30 days prior to commencing operations from any new WCS transmission site or with increased power from any existing WCS transmission site, a WCS licensee shall notify all BRS/EBS licensees in or through whose licensed service areas they intend to operate of the technical parameters of the WCS transmission facility. WCS and BRS/EBS licensees are expected to coordinate voluntarily and in good faith to avoid interference problems and to allow the greatest operational flexibility in each other's operations.

\* \* \* \* \*

33. Part 27 is amended to add a new Subpart M to read as follows:

**Subpart M—Broadband Radio Service and Educational Broadband Service**

**27.1200 Change to BRS and EBS.**

**27.1201 EBS Eligibility.**

**27.1202 Cable/BRS Cross-ownership.**

**27.1203 EBS Programming Requirements.**

**27.1206 Geographic Service Area.**

**27.1207 BTA License Authorization.**

**27.1208 Service Areas.**

**27.1209 Conversion of Incumbent EBS and BRS Stations to Geographic Area Licensing.**

**27.1210 Remote Control Operation.**

**27.1211 Unattended Operation.**

**27.1212 License Term.**

**27.1213 Designated entity provisions for BRS in Commission auctions commencing prior to January 1, 2004.**

**27.1214 EBS spectrum leasing arrangements and grandfathered leases.**

**Technical Standards**

**27.1220 Transmission standards.**

**27.1221 Interference Protection.**

**27.1222 Operations in the 2568-2572 and 2614-2618 bands.**

**Policies Governing the Transition of the 2500-2690 MHz Band for BRS and EBS.**

**27.1230 Conversion of the 2500-2690 MHz band.**

**27.1231 Initiating the transition.**

**27.1232 Planning the Transition.**

**27.1233 Reimbursement costs of transitioning.**

**27.1234 Terminating existing operations in transitioned markets.**

**27.1235 Post-transition notification.**

**§ 27.1200 Change to BRS and EBS.**

(a) As of [Insert the effective date of the rules], licensees assigned to the Multipoint Distribution Service (MDS) and the Multichannel Multipoint Distribution Service (MMDS) shall be reassigned to the Broadband Radio Service (BRS) and licensees in the Instructional Television Fixed Service (ITFS) shall be reassigned to the Educational Broadband Service (EBS).

**§ 27.1201 EBS Eligibility.**

(a) With certain limited exceptions set forth in (c) below, a license for an Educational Broadband Service station will be issued only to an accredited institution or to a governmental organization engaged in the formal education of enrolled students or to a nonprofit organization whose purposes are educational and include providing educational and instructional television material to such accredited institutions and governmental organizations, and which is otherwise qualified under the statutory provisions of the Communications Act of 1934, as amended.

(1) A publicly supported educational institution must be accredited by the appropriate state department of education.

(2) A privately controlled educational institution must be accredited by the appropriate state department of education or the recognized regional and national accrediting organizations.

(3) Those applicant organizations whose eligibility is established by service to accredited institutional or governmental organizations must submit documentation from proposed receive sites demonstrating that they will receive and use the applicant's educational usage. In place of this documentation, a state educational television (ETV) commission may demonstrate that the public schools it proposes to serve are required to use its proposed educational usage. Documentation from proposed receive sites which are to establish the eligibility of an entity not serving its own enrolled students for credit should be in letter form, written and signed by an administrator or authority who is responsible for the receive site's curriculum planning. No receive site more than 35 miles from the transmitter site shall be used to establish basic eligibility. The administrator must indicate that the applicant's program offerings have been viewed and that such programming will be incorporated in the site's curriculum. The letter should discuss the types of programming and hours per week of formal and informal programming expected to be used and the site's involvement in the planning, scheduling and production of programming. If other levels of authority must be obtained before a firm commitment to utilize the service can be made, the nature and extent of such additional authorization(s) must be provided.

(4) Nonlocal applicants, in addition to submitting letters from proposed receive sites, must demonstrate the establishment of a local program committee in each community where they apply. Letters submitted on behalf of a nonlocal entity must confirm that a member of the receive site's staff will serve on the local program committee and demonstrate a recognition of the composition and power of the committee. The letter should show that the staff member will aid in the selection, scheduling and production of the programming received over the system.

(b) No numerical limit is placed on the number of stations which may be licensed to a single licensee. A single license may be issued for more than one transmitter if they are to be located at a common site and operated by the same licensee. Applicants are expected to accomplish the proposed operation by the use of the smallest number of channels required to provide the needed service.

(c) (1) Notwithstanding paragraph (a), a wireless cable entity may be licensed on EBS frequencies in areas where at least eight other EBS channels remain available in the community for future EBS use. Channels will be considered available for future EBS use if there are no co-channel operators or applicants within 80.5 km (50 miles) of the transmitter site of the proposed wireless cable operation, and if the transmitter site remains available for use at reasonable terms by new EBS applicants on those channels within three years of commencing operation.

(2) No more than eight EBS channels per community may be licensed to wireless cable entities.

(3) To be licensed on EBS channels, a wireless cable applicant must hold a license or a lease, or must have filed an unopposed application for at least four BRS channels to be used in conjunction with the facilities proposed on the EBS frequencies. An unopposed application is one that faces no competing application(s) or petition(s) to deny. Applicants will be required to confirm their unopposed status after the period for filing competing applications and petitions to deny has passed. If a BRS application is opposed, the companion EBS application will be returned.

(4) To be licensed on EBS channels, a wireless cable applicant must show that there are no BRS channels available for application, purchase or lease that could be used in lieu of the EBS frequencies applied for. A wireless cable entity may apply for EBS channels at the same time it applies for the related BRS frequencies, but if that BRS application is opposed by a timely filed mutually exclusive application or petition to deny, the application for EBS facilities will be returned.

(5) If an EBS application and a wireless cable application for available EBS facilities are mutually exclusive, the EBS application will be granted if the applicant is qualified. An EBS applicant may not file an application mutually exclusive with a wireless cable application if there are other EBS channels available for the proposed EBS facility.

(6) (i) An educational institution or entity that would be eligible for EBS channels that are licensed to a wireless cable entity may be entitled to access to those channels. Requests for access may be made by filing a request with the Commission. A cover letter must clearly indicate that the application is for EBS access to a wireless cable entity's facilities on EBS channels.

(ii) An EBS entity determined by the Commission to have right of access to wireless cable licensed facilities may have access to a maximum of 40 hours per channel per week. The EBS entity has the right to designate 20 of those hours as follows: 3 hours of the EBS entity's choice each day, Monday through Friday, between 8 a.m. and 10 p.m., excluding weekends, holidays and school vacations; and the remaining five hours any time of the EBS entity's choice between 8 a.m. and 10 p.m., Monday through Saturday.

(iii) No time-of-day and day-of-week obligations will be imposed on either party with respect to the other 20 hours of access time.

(iv) The EBS user must provide the wireless cable licensee with its planned schedule of use four months in advance. No minimum amount of programming will be required of an EBS operator seeking access to one channel; for access to a second channel, the EBS user must use at least 20 hours per week on the first channel from 8 a.m. to 10 p.m., Monday through Saturday; for access to a third channel, the EBS entity must use at least 20 hours per week on the first channel and on the second channel during the hours prescribed above, and so on. Only one educational institution or entity per wireless cable licensed channel will be entitled to access from the wireless cable entity. Access will not be granted to a single entity for more than four channels, unless it can satisfy the waiver provisions of § 27.5(i)(3) of this part.

(v) When an EBS entity is granted access to an EBS channel of a wireless cable licensee, the wireless cable licensee will be required to pay half of the cost of five standard receive sites on that channel. The wireless cable entity may, at its option, pay the costs of an application and facility construction for such EBS entity on other available EBS channels, including half of the cost of five receive sites per channel.

(vi) After three years of operation, a wireless cable entity licensed to use EBS channels will not be required to grant new or additional access to such EBS channels, or provide any alternative facilities to any EBS entity seeking access to its facilities, if there are suitable EBS frequencies available for the EBS